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ART. I—*Medical Journals and Medical Criticism.* By W. S. CHIPLEY, M. D., of Lexington, Ky.

Periodical medicine has exerted a wonderful influence for the space of more than a century. If it cannot command our veneration by its antiquity, it must be confessed to be exceedingly interesting and instructive in its comparatively brief history. It has been productive of much good and has, not unfrequently, wrought great wrong.—It has often puffed into magnitude the merest pretender; while, for a time, it has been but too successful in throwing obscuring shadows over the really meritorious—repressing their energies, and casting a damper upon the fires of their enthusiasm. It has scattered broad cast over the civilized world a multitude of valuable facts, the aggregation of which has developed important practical principles; but with the precious grain have been sown tares, in the form of "false facts" which, like *ignes fatui*, have led many a luckless wight from truth far into the dominion of error. It has been made the instrument for

the overthrow of prevailing doctrines, and for the propagation of many of the wildest fancies that the perverted intellect of man ever conceived. At one time the vehicle of visionary conceits, that dissolved on the first touch of reason and philosophy, leaving not a wreck behind; at another it has been the medium through which have been developed some of the noblest conceptions of human genius, the most valuable improvements of the human intellect, and the most useful practical principles ever derived from human experience.

Its history is indeed rich in interesting materials for a graphic pen, and if fully and fairly traced would be one of the most acceptable and instructive pictures that could be presented to the profession. For our present purpose, a mere allusion to its early dawn in our mother country, and its growth in this, will be sufficient.

The first medical periodical in Great Britain, "*The Medical Essays and Observations, by a Society in Edinburg*," was issued in 1730. Similar enterprises were soon undertaken at different points; some destined to languish through a brief and feeble existence; others, to live long, and to add much to the sum of accumulating knowledge, and lustre to the reputation of their illustrious conductors. In the course of one hundred years so considerable was the increase of the number of periodicals devoted to the interests of the healing art that a distinguished journalist declared, "that a time, it is possible, may come, when a medical journal will issue with each clock that strikes, from nine in the morning till ten at night." Nor would this consummation be anything but desirable, if the quality kept pace with the quantity. For this mode of instruction has ever been since its origin deservedly popular with the profession; the information conveyed to it by this means is so fresh, and in a form so attractive, that not a few practitioners peruse medical periodicals with avidity, who are almost utter strangers to systematic works.

When conducted or supplied with material by such men as Monro, Douglas, Barry, John Armstrong, Pringle, Fothergill, Duncan, James Johnson, or by such as Mitchell, Miller, Smith, Coxe, Hosack, Francis, Caldwell, Chapman, and a host of others, in our own country, it would be difficult to over-estimate their importance or to exaggerate their value. But when they sink down, and become the mere organs of some medical school, on which they are designed to confer unmerited consequence, or are issued for notoriety by individuals, who seek self-aggrandizement by unblushing self-laudation, they are perverted from their legitimate and valuable purposes, by their incompetent, and not unfrequently, dishonest conductors, who would indiscriminately strike truth to the earth if interposed between them and their object.

The reason given in 1730, for the presentation of a medical periodical to the profession in Great Britain, has been reiterated by the projectors of almost all of its numerous successors in every part of the cultivated world. The editors say: "No complaint is more general among those who apply to the study of any liberal science, than their being under a necessity of perusing such numbers of publications as are wrote, or the several parts of each of them—a labor that can have no end, since one book serves only as an introduction to another, while a few pages might contain all that is new or valuable in *most of them.*"

This is certainly a good and sufficient reason for the establishment and continuation of periodical medicine, especially, if it be true, as was charged many years ago, that the greater number of medical publications are written "for anything rather than with a view to promote the science of medicine."

With a brief notice of periodical medicine in this country, we may perceive to what extent our journals have subserved the purpose of giving to the profession all that

our books contain that is new and valuable; and how far they are to be relied upon, in their criticisms of new works, in directing the practitioner in the purchase of valuable and reliable ones, and in protecting him from imposition by mere pretenders in authorship.

The first medical periodical issued in America, the "Medical Repository," made its appearance in New York in 1797, and was edited by Drs. Mitchell, Miller and Smith. This journal was conducted with signal ability, and is, to this day, a valuable work of reference. Stored with innumerable facts, well observed and faithfully recorded, and enriched with the thoughts of some of the first intellects that have adorned our profession, it can never cease to be a source of just pride to those who look back to that early period of our national history. Little more than half a score of years had elapsed since the termination of that eventful struggle which had severed our connection with a country, to which we had naturally looked for instruction in every department of science and literature; yet at that early period, we have evidence of a vigor of intellect and independence of thought that would be highly creditable to any people.

In 1804, the "Philadelphia Medical Museum" was presented to the profession, under the auspices of John Redman Coxe, M. D., who deemed it proper to apologize for undertaking to conduct such a work, when so good a journal as the "Repository" already existed. But no one can consult the pages of this periodical, without a feeling of gratitude to Dr. Coxe, for the immense amount of valuable matter which he has stored up in the volumes of his journal, and much of which will be held in high esteem as long as medicine is cultivated as a science.

"The American Medical and Philosophical Register" made its appearance in 1810, conducted by those distinguished cultivators of medical science, Drs. Hosack and Francis.

In 1812, Boston followed her sister cities into this interesting field, giving to the profession "The New England Journal of Medicine and Surgery."

Up to this period, and for some years after, the medical journals in this country were few in number, but they were conducted by men of eminent ability and enlarged experience, aided by contributors who would adorn any age. With an eye single to the advancement of medical science, the improvement of their professional brethren, and the welfare of society—with truth only for their guide, and uninfluenced by devotion to this or that clique, or the interest of this or that school, they bent all the energy of their vast intellects to the study of nature, and to the discovery of those broad principles which are to direct the medical philosopher in the great struggle against disease and death. Having no favorite but truth—no system but nature, their works will endure while truth is admired and nature is consistent.

In the department of criticism, there was a manifestation of a candor, truthfulness, an elevation of thought, and a moral dignity, that inspired confidence, and may have furnished the original of the poet's picture when,

> "Critic was a glorious name,
> Whose sanction handed merit up to fame;
> Beauties as well as faults he brought to view—
> His judgment great, and great his candor too."

These great works have been succeeded by a host of journals, professing the same objects; they are springing up in every section of our wide extended country; every sect, school and party in medicine, and even individuals deem it a matter of importance to have a monthly or quarterly to sustain their peculiar interests and views. So numerous have they become, that the prediction of the English journalist is now in a fair way of being verified in this country; and we cannot but regret that while many of them are creditable to the literature of our native land,

characterised alike by the scientific attainments of their editors and contributors, and the spirit of fairness, justice and impartiality that pervades their pages; there are others marked by a carelessness, indolence or incompetence that cannot fail to lower the literary reputation of the mass of the profession. There are still others that bear the stamp of a more discreditable spirit—that spirit that feels alone the impulse of envy and jealousy, or that seeks notoriety only as a means of mercenary gain. The advantages of criticism are admitted to be manifold, when governed by the pure principles of justice, and directed by an unwavering regard to the general good. But the critic to fulfil his function with honor to himself and advantage to his reader, must possess many of the loftiest and most ennobling qualities of our nature. In addition to varied information, he must possess a penetration that can pierce the depths of the subject he undertakes to examine, a clear conception of what is lofty and sublime; what low, mean, and trivial, what appropriate and useful, or improper and hurtful. Discarding the baser qualities of our nature—envy, jealousy and hatred, he must bring to the consideration of his subject a delicate and discerning taste, chastened by that charity that delights to dwell upon truth, merit, and beauty, rather than to seize upon the errors, blemishes and faults that, after all, may be but specks that mar the perfection of a work, and prove it to be the production of man.

The critic who is suitably impressed with the importance, responsibility and dignity of his high vocation, loves to cherish the truthful and good, and encounters the antipodes of these only with pain and regret. While, as in duty bound, he is sometimes required to censure the work, charity interposes between him and his author. If there be any good, though mingled with a mass of error, it is his duty to acknowledge the former, as it is his prerogative to condemn the latter.

He should never forget that he himself may be deficient in attention or penetration, or ignorant of some collateral branch of science, and be thus led to attribute faults to his author which belong alone to himself. He is wholly unfitted for the office of critic who does not partake of that enlarged and liberal spirit which actuated Socrates in his reply to one who asked his opinion of a work that he had just perused; "what I understand I find to be excellent, and therefore, believe that to be of equal value which I cannot understand."

There are some who seem to think that no criticism will be relished unless it be highly seasoned, not by candid and philosophical exposure of error, but by assaults of ridicule or denunciation of the author. This is a great mistake. The mass of the profession, who are actively engaged in the discharge of their arduous duties, and who have a conscientious regard to the welfare of those committed to their charge, look upon such exhibitions of temper and feeling only with loathing and disgust. Whenever criticism, especially of medical works, passes beyond the bounds of fair and generous scrutiny, and descends from its high position to deal in invective instead of facts—in ridicule instead of argument, the great mass of medical men will believe with an eminent writer, that "it is too often founded in self-conceit, prejudice and unworthy feeling."

While it is a duty to repel the intrusive impertinence of ignorant literary coxcombs, and to expose the empirical pretensions of the arrogant knave, the critic should never forget that his chief duty is to instruct, not to censure; least of all should he seek to feed his own vanity by striking at unresisting feebleness—to gratify his envy by seeking to drag others to his own level, or his malice by wantonly wounding the sensibility of his author. All such feelings and motives will be discarded by those who have a proper regard to the principles of justice, to

their own honor and to the good of their readers. Gentle admonition of error may be beneficial to the author who elicits it, but the ill-natured ravings of a self-constituted and conceited critic can be productive of no good, and merits only the contempt of the virtuous and enlightened.

It has been truly said, that the critic who has little to hazard, is apt to strike with fearless impetuosity, and his blows are never more eager or wilder than when his head whirls with gazing far above him at the philosophic, quiet renown and immortality of his author.

There are numerous classes of critics. Some open a book only to look for pleasing flowers and enchanting prospects; charmed with these, they close their eyes upon any errors or faults that may fall in their way. This may be pardoned as an amiable weakness. But there is another class who open a book only to seek and dwell upon its faults—lost to every feeling of humanity and justice, they revel with delight on that which should give only pain—vitiated in taste, malicious in feeling, blind to the most striking beauties, and deaf to every sound of truth, their ravings are proportioned to the excellency, and their happiness may be measured by the defects of their author:

> "Hot, envious, noisy, proud, the scribbling fry,
> Burn, hiss, and bounce, waste paper, ink and die."

There is another class somewhat more discriminating. Their criticism takes its cast and complexion from the name that may happen to grace the title page.

If the author is a favorite, especially if he be an advocate of the critic's peculiar notions, he may calculate with certainty, on being besprinkled with praise without judgment, and adulation without measure. No assumptions of fact—no errors in argument—no obscurity in style or impropriety of diction will make any impression; but all meet the unqualified approbation of the single-minded critic.

But if the author has been so unfortunate as to have offended the critic, or entertains views dissimilar to his own, the picture is reversed; the facts are false or inapplicable—the deductions illegitimate—the style feeble and obscure—the diction low, mean and incorrect.

The sycophancy and injustice displayed by these gross and venal writers would be incredible to one who has not observed them. They dwell with an earnestness of which truth only is worthy, and a vociferation which betrays their falsity, on the faults of an individual whom they choose to regard as an enemy; and assiduously labor to conceal, and not unfrequently they warmly defend, the same offences in an idol or partisan. Both departures from a right line are detestable; yet they are but too often manifest in periodicals that ought to be devoted only to truth and justice.

It is lamentable to observe the complete mental prostitution of certain partisan writers, ardently engaged in palliating error, disguising truth, mimicing conviction, and misleading the unwary. The grossest adulation of a favorite, or of one from whom something may be expected, often flows from the same pen that traces the vilest slanders of those whose superior attainments arouse the rancorous feelings of little minds, who, knowing that they cannot rival, seek to destroy;—who, conscious that they cannot fairly win position, strive to attain it by flattery on the one hand and defamation on the other. There is, however, one consolation for able writers, happily expressed by the poet:

> "Good authors damn'd, have their revenge in this,
> To see what wretches gain the praise they miss."

I have known instances of persons of some fancy, but of little knowledge and less judgment, assuming the responsible duties of an editor of a medical journal, apparently for no other purpose than that of waging war against every thing and every body. Literary Corsairs,

they make piratical depredations upon other periodicals, for every thing valuable that their own contains, while their editorial efforts are mainly limited to vituperative assaults on those who have the independence to think for themselves, and the manliness to speak their opinions without fear or favor;—or to personal detraction of those whose virtues, attainments and renown they may never hope to emulate. A little insight into the history of these unscrupulous Ishmaelites, will usually bring the conviction that they are actuated by feelings embittered by disappointed ambition, and that their envenomed shafts fly thick and fast in proportion as they have hoped without reason, and aspired without merit. They readily bring themselves to believe that the world has thought enough of them to stretch forth its mighty hand to crush their hopes, and to defeat their cherished aspirations, when the very reckless effort to avenge their fancied wrongs proves at the same time, the cause of failure to have been their own innate feebleness, and vindicate the justness of the decree that drives them to an obscurity from which they can escape only by becoming

"Fix'd statues on the pedestal of scorn."

I regret to say, that the multiplication of medical schools has given birth to another class of critics, who can see nothing good in any production emanating from any school to which they are not attached—and nothing but perfection in the bantlings of those with whom they are associated or hope to become connected. The rivalship of medical schools has thus been a fruitful source of evil, and has nurtured a bad spirit in the highest walks of the profession—has induced the most extravagant laudation of mere pigmies, and the defamation of the ablest teachers and writers that adorn the present age. There are some, alas too many, in the medical profession, who are too impatient to bide their time;—greedy of present self-aggrandisement, they do not hesitate to sacrifice fu-

ture reputation to an ambition out of all proportion to their merit and acquirements.

Many of the medical critics of the present day are so manifestly tinctured with false taste, prejudice, envy and jealousy, as to remind one of the beautiful allegory of Dr. Johnson, in which Criticism is represented as the daughter of Labor and Truth. At birth she was committed to the care of Justice, and brought up in the palace of Wisdom. When about to visit our sphere, her preceptor and guardian conferred upon her a sceptre, which she bore aloft in her right hand; one end was tinctured with ambrosia and enwreathed with golden foliage of amaranths and bays; the other end was encircled with cypress and poppies, and dipped in the waters of oblivion. In her left hand was an inextinguishable torch, manufactured by Labor and lighted by Truth. A single gleam of this torch penetrated the dark labyrinths of sophistry, and pierced the veil which rhetoric too often throws over the deformities of error. A touch of one end of her scepter conferred immortality—of the other, oblivion. But the intermixture of good and bad, characteristic of all human productions, often rendered doubtful the question whether the work merited the one or the other. Criticism observed the conduct of Time, and was so well pleased with his decisions that she withdrew from the earth, with her patroness Astrea, and left Prejudice and False-Taste to ravage at large, as the associates of Fraud and Mischief; contenting herself henceforth to shed her influence from afar upon some select minds, fitted for its reception by learning and by virtue. Before her departure she broke her scepter; a part of the ambrosia was caught up by Flattery, and with equal avidity the lethean portion was seized by Malevolence. Flattery neither had nor desired light, but touched indiscriminately whatever Power and Interest happened to exhibit; the Furies furnished Malevolence a torch whose infernal lustre shed light only on faults.

Not a few critics of the present day seem to have possessed themselves of fragments from both ends of the broken scepter, and thus armed seek by flattery and malevolence to confer immortality, or to condemn to oblivion. But the scepter has lost its power, and Time passes his sentence at leisure, without any regard to their determination.

Incapable of producing any work of learning or genius, by which they may win a substantial reputation, these writers hang about the portals of fame, ever ready to raise the hue and cry, in which they are eagerly joined by Ignorance and Envy, in pursuit of their noble prey; or, conscious of their own weakness, and dependent upon the favor of those in power, they frown and flatter, and thus sometimes crawl to the goal of their hopes; their whole course, dictated by self-interest, is marked by injustice and insincerity. Temporary success may thus reward their unhallowed exertions, but, in the language of a medical philosopher, "the public is a stern, inflexible, and finally, unerring tribunal, before which it is unnecessary to plead the cause of merit, and useless to varnish infirmity." Friends may flatter and enemies may defame, but the public at large do justice, because they are far removed from the sphere of personal feeling and influence.

Another source of evil, is to be found in that species of criticism, modestly called a "notice" of a new book. No argument can be necessary to convince any one of reflection that, whether the work be meritorious or the reverse, justice cannot be done to the author, or to the reader, without an analysis. These notices are often written by men every way competent to judge, and with honesty enough to be impartial; but pressed by other engagements they too often endorse the book, because it bears a name known to fame, or express an opinion after an examination of perhaps only the preface or a single chapter.

In these notices we are furnished with no elements on

which to base a judgment—we have simply the opinion of the critic, and a fair presumption arises that this is not the result of a careful perusal of his author.

The result is that, not unfrequently, the members of the profession are induced to purchase an inferior work, and to neglect another of great value.

I have known the readers of one medical journal to be seeking to procure a new volume; while those of another periodical would speak of the same work with the utmost contempt, as utterly valueless and unworthy of perusal. It will be readily perceived how this may occur, when it is considered how widely the medical critics differ in their estimates of the same book. A few examples will illustrate this point more clearly. In giving them, I do not wish to be understood as charging the writers with any improper motive, or with a design to do injustice to authors. These differences may have arisen from an honest difference of opinion, but, probably, more frequently from a want of time for a thorough examination and analysis of the book.

The following examples are from recent American medical journals, but such discrepancies are not peculiar to our periodicals; they abound also in those of Europe, but I have not thought proper to note them.

A western journal thus notices a work not long since published:—

"We have no doubt that this treatise will prove highly useful to the young practitioners of the south. The author seems to be an acute observer, a patient and indefatigable student, and, what is by no means unimportant, clothes his ideas in a clear, agreeable, and concise style. To the class of practitioners for whom it is designed, we most earnestly commend Dr. McGown's work, and advise them to study its pages carefully and deliberately. The northern physician who emigrates south, will find this work of great service," &c.

The same work is reviewed by a southern journal, and the following is a quotation from it.

After censuring the culpable omission of many of the most common diseases of the south, the reviewer says, "we might dismiss the work, but lest by steam or some '*accident*,' it should be carried out of the State in which it was written, we feel it our duty, as a journalist, to allude to its deficiencies, if not to expose its errors, both on account of its style and the principles inculcated.

"Instead of advancing the views and unfolding the principles which govern our practice in this region (the south) the author has confined himself to some common-place observations on a class of diseases as rare, in this latitude, as hydrophobia, the dance of St. Vitus, or any other accidental complaint.

"This feeble attempt to shed light upon a subject of which the author seems to know really but little," &c.

It would be difficult to find more pointed contradictions than are contained in these two notices of the same work. Highly commended by one, as useful and instructive, it is as bitterly denounced by the other, as incorrect in style, deficient in matter, and defective in practice. I do not know who is right and who wrong; but the effect is obvious; a student and reader of the first may be induced to procure the book and labor to master its contents, while a similar reader of the other journal would never think of wasting time on so trifling a production. One or the other is greatly wronged; for the one loses the time occupied in studying an incorrect and feeble effort, to develope the character and treatment of an important class of diseases, —a work defective both in style and principles; or the other is deterred from procuring the work of an acute observer, and patient and indefatigable student, who clothes his ideas in a clear, agreeable and concise style.

An eastern journal thus notices a work on the practice of medicine:

"The author's descriptions of disease are, in general, loose, vague, imperfect and confused," &c.

Of the same work, a western journal remarks:

"Much of the author's limited space small as it is, is taken up by matter which would have appeared to more advantage in the funny column of a country newspaper, than in a sober treatise on practical medicine. Nor can it be considered a very reliable guide for the student of medicine," &c.

Of the same work, another western journal says:

"The work before us bears evidence of extensive experience, careful observation, and judicious treatment of disease, and we have no doubt the young practitioner will find in it much valuable advice. We sincerely hope it may meet with a ready sale."

One journal says, of an Essay on Intestinal Auscultation, by Charles Hooker, M. D.:

"We have read with great interest the remarks of Dr. Hooker, and duly appreciate his contributions to this new source of diagnosis."

Of the same work another journal says:

"We can but think a learned professor might find some better occupation than chasing, per chance, a cubic inch of *sulphuretted hydrogen gas* through a tube, measuring more than thirty feet in length."

'Review of Chemistry for students,' by John G. Murphy, M. D., is thus noticed by one critic:—

"The author has accomplished his objects in a satisfactory manner, and the student will no doubt find his advantage in embracing the opportunity offered of lessening labor and saving time," &c. The errors are "so few in number as not to materially affect the value of the work as a whole."

Another thus speaks of the same work:

"So far as we have been able to examine this work, it appears to be admirably adapted to facilitate the study of chemistry by students," &c.

How different is the estimate of a cotemporary journal, in which the following occurs:—

"We are sorry to say that the imperfect style, the many

inaccuracies, the confused and obscure expressions of his work, are rather calculated to mislead and confuse, than to enlighten and inform; and that the object of the author is totally defeated by his unfortunate attempt to make a digest of the productions and opinions of others in his own miserable style."

In a notice of an introductory lecture, one journal says:

"It is a spirited and vigorous production, graced with a fancy and animation of style, which we were not entirely prepared for, and we need hardly add, distinguished by an elevated tone on the subject of medical education."

Of this same 'lecture' a cotemporary critic remarks:

"The author presents a striking example of a mind so stored with heterogeneous knowledge, as to defy order, and trammelled by the very *'embarras de richesses.'* There is a provoking indefinitiveness running through the entire twenty-eight pages," &c. "In his usually obscure style," &c. "Several pages of solemn quiddities," &c. "Too much learnnig has not made him mad—but obfuscated the clear perceptions of mother wit," &c.

Examples similar to the above might be multiplied *usque ad nauseam*, if not *ad infinitum*; but enough have been given to exhibit the contrariety of opinion that exists amongst those to whom the whole profession look for guidance and instruction; and to demonstrate the uncertain sounds by which those, who are endeavoring to keep pace with the advance of medical science, are expected to be directed. The evil is manifestly enormous, and no one can contest the propriety of abating it. In common with the mass of the profession, I have felt its force, but abler and more influential men must supply the remedy. While the first minds in the profession, who have the commanding influence of talents and position, differ so widely in taste, principles, and practice, we cannot hope for the removal of that stigma so often cast in our teeth, that "doctors will disagree."

In the above remarks, I have carefully avoided making any application to any particular journal; and hope I shall

not be considered as arrogating to myself the position of a censor. I aspire to no such office, but have sought to direct attention to what are very generally considered serious defects in many of the medical periodicals of the present day. Many of these periodicals are conducted by as honest, capable, and faithful men as can be found in any country—men of chaste and refined taste—of enlarged and liberal views—of varied and extensive acquirements, and of steady unwavering devotion to truth and justice. These, too, are aided by correspondents, possessing a tact for accurate observation and an ability to record their observations, that cannot fail to add to, and develope new resources against the numerous ills to which flesh is heir.

To these a liberal and generous support is due, and will rarely fail to be awarded. If they sometimes propagate error, no base motive stimulates to the act, and may be justly set down to the frailty of humanity. The good they do is immeasurable, and will live long after their unintentional errors are forgotten. Besides these, there are a few journals established and conducted by second rate, but ambitious and desperate adventurers, with whom the character and dignity of the profession are objects of secondary importance. For a time these inflict great and general injury; but, at no distant period, they will sink to their proper level, to be remembered only with merited contempt. Controlled by good sense, enlightened by careful study, actuated by a pure spirit of justice and devotion to our noble profession, the mass of our brethren, to their honor be it spoken, speedily discover the character and motives of journals of this character, and with commendable alacrity and unanimity, leave them to languish and expire in deserved neglect.

September, 1851.

ART. II.—*Remarks on the Use of the Nitrate of Silver in Leucorrhea.* By NAPOLEON B. ANDERSON, M. D., of Louisville, Ky.

In the practice of medicine, the physician encounters many forms of disease which baffle all the resources of his art. Among those which have been a fruitful source of disappointment and mortification to the young practitioner, *Leucorrhea* is conspicuous. It has been treated by every conceivable mode, and in a majority of cases all the usual remedies have failed to relieve it. I have seen the lancet tried, with spare diet, laxatives, and the antiphlogistic treatment generally. I have seen it treated with astringents and tonics, local and general—have seen different patients take calomel, guiacum, copaiba, cantharides, arnica, lime-water, myrrh, bark, rhubarb steel, sarsaparilla, uva ursi, iodine, opiates, diuretic salts, cicuta, kino and the balm of gilead; seen them use injections of nitrate of silver, tannin, alum, sulphate of copper and zinc; seen the warm and cold hip-bath resorted to, and all without effect. The inference is irresistible—the complaint has been treated empirically. We have been groping in the dark, without any clear conception of the morbid condition giving rise to the symptoms. We have been treating a symptom instead of a pathological state. As long as we pursue this course we shall be disappointed in the result of our curative efforts. But there is no longer an excuse for adhering to a blind routine practice in this complaint; we possess the means for acquiring precise, accurate knowledge concerning its seat, cause, and character. The *speculum* enables us to do with the parts in which it has its origin what the unaided eye can do in the case of disease of external organs.

And yet, strange as it may appear, there are physicians who deprecate the use of this instrument. There are those who, with all the substantial aid it furnishes us,

would proscribe its employment in every case. They maintain that it is indelicate; that it is shocking to female modesty, and hurtful to female virtue, and that what we gain over the maladies of our fair countrywomen society loses in morality. They fall in with the popular prejudice, which would confine obstetrical practice to the hands of females. They would have none midwives but women.

Now all this must strike sensible men as eminently absurd. Nothing pursued with reference to the promotion of science can be immoral in its tendency. Female modesty is in no more danger from examinations looking to disease than from the manipulations necessary in parturition. If it has gone unharmed through the long centuries in which male midwifery has been practiced, it may be presumed that it will not be damaged by the use of the speculum.

Leucorrhea is always a secondary affection. In the healthy state of the parts, the vagina and cervix-uteri are lubricated with a fluid secreted by the lacunæ on their surface, and a serous exhalation from the membrane lining the cavity of the uterus; but while the parts are healthy, the absorption and secretion are so nearly balanced that no external discharge takes place. In *fluor albus*, there is perverted as well as augmented secretion. There is increased sensibility of the parts, and a bearing down sense about the uterus, with pains, in some cases, in the rectum, the bladder, the thighs, and the back. It is often attended with prolapsus uteri, and perhaps as often depends upon ulceration of the cervix. And how are we to make a correct diagnosis of each case? Shall we trust to the old methods, or call in the aid of the speculum? I deem that few practitioners will hesitate to avail themselves of all the light they can command in such circumstances.

In the course of the last year I have had an opportu-

nity of treating forty-one cases of leucorrhea, and the results have been so satisfactory that I feel justified in submitting my experience to the profession. I am sure that no physician after trying the improved method, will ever be satisfied to return to the old practice of tonics and astringent injections. Not that tonics are not useful in their proper place. I have found them highly beneficial in many cases, but they are to be looked upon as adjuvants to the main remedy—the nitrate of silver locally applied. So long as the morbid condition giving rise to the unhealthy secretion continues, constitutional remedies are of no avail. The cause must first be removed, and at a knowledge of this, as has already been remarked, we must arrive by means of the speculum.

In nine cases out of ten which have come under my treatment, I have found no difficulty in obtaining the consent of the patient to the use of the speculum: the woman is then placed in a horizontal position, on a lounge or bed, the hips elevated higher than the head; a loose sheet is thrown over her person, in which is an aperture sufficient to admit the speculum; (that which I use is glass;) it is well lubricated, and then insinuated as far as possible into the vagina, following the axis of the pelvis;—the os uteri readily descends into the mouth of the instrument, inclining backward and downwards, which, by depressing the handle, will remain in the centre of the instrument. In this position, before a window, or with the use of a candle, the organ can be viewed to its full extent, and the ulcerated surface found. In nearly every case it presents the same appearance. The neck is found flabby, swollen, and of a pale red and bluish cast—the anterior and posterior lips being much elongated, with the greater portion of the neck ulcerated to some extent. In about one half of the cases, the ulceration is within, as well as without the neck, and extends some distance into the cavity of the uterus; whilst in the remaining half, it is limited to an area

of one-third of the neck, and anterior and posterior lips, the cavity not partaking of the ulceration. In every case, the ulcerated surface is to some extent the same, with but little sensibility about the parts; no pain is ever felt on applying the caustic freely, both around the neck and within the uterine cavity, for the mouth is always open sufficiently to admit of its introduction.

In the first place, the parts are cleansed with a soft sponge attached to a whale-bone handle, in mop shape, after which the nitrate of silver, in the solid form, is applied very freely to every part diseased. This operation is repeated according to indications, from three to seven days apart, and during the interval, cold water injections several times a day are to be used conjointly with tonics. In some cases I have used the speculum as often as ten times, but in the great majority of cases, it is not necessary to resort to it often.

Those cases in which the ulceration was seated within the neck and cavity of the uterus occurred in weakly females, who had borne a great number of children, and some with the aid of forceps. In unmarried ladies, it was always seated on the external parts of the neck, and the anterior lip. In the cases in which the cavity was implicated, the free use of the silver was not found to have interfered in the least with the catamenia.

In almost every case where a female does not bear children, I have found fluor albus to be present;—unquestionably this disease is a frequent cause of sterility—the ulceration of the neck and cavity interfering with the intromission of the semen, which passes away with the profuse discharge.

September, 1851.

REVIEWS.

ART. III—*Lectures on the Eruptive Fevers,* as now in the course of delivery at St. Thomas's Hospital, London. By GEORGE GREGORY, M. D., Fellow of the Royal College of Physicians of London; Physician to the Small-Pox and Vaccination Hospital at Highgate; Corresponding Member of the National Institute of Washington, etc. First American edition, with numerous additions and amendments by the Author, comprising his latest views: With notes and an appendix, embodying the most recent opinions on exanthematic pathology; and also statistical tables, and colored plates. By H. D. BULKLEY, M. D., Physician of the New York Hospital; Fellow of the New York College of Physicians and Surgeons, etc. etc. p.p. 379, 8vo. New York: S. S. and W. Wood, Publishers. 1851.

These Lectures were delivered and published in London, in 1843, and have been repeated at St. Thomas's Hospital every year since. Of the importance of the subject of which they treat a more forcible illustration could not be given than the fact, that the eruptive fevers together with hooping cough "absorb one ninth of the mortality" of Great Britain "and probably of all other countries. The skin is a highly sensitive organ, and exercises a controlling influence over the animal economy. "A man may lose one half of his lungs by slow ulceration, and he may yet live for months, nay, for years. But if one half, or one third, or even one fourth of the skin of the body be destroyed, the system rapidly gives way, and death ensues." The skin is the fourth in the series of important organs, yielding only to those of the encephalon, the chest, and the abdomen.

Dr. Gregory divides his subjects into the greater and lesser Exanthemata; the former embracing Small Pox, Measles, Scarlatina, and Erysipelas; the latter Vaccinia, Varicella, Herpes, Miliaria Lichen, Urticaria, Roseola, and Erythema. By the first class, life is brought seriously into danger; the latter are comparatively harmless. In some years, the mortality from the acute exanthemata rises in Great Britain as high as thirteen per cent., and in others falls as low as six; but it is a curious fact, adverted to by Dr. G., that "the epidemic mortality remains, on an average of years, nearly the same," some other disease coming in to equalize the fluctuations. This law of "*vicarious mortality*" is exemplified in a table, showing that in a series of years, whenever one epidemic diminished another increased—that if small pox prevailed, scarlet fever and measles were less prevalent, but that every year was distinguished by some "master epidemic." In 1838, the mortality from small pox, in England and Wales, was 10,268; from measles, 6,514; from scarlet fever, 5,802. In 1839, from small pox, it was 9,131; from measles 10,937; and from scarlet fever, 10,325. In 1840, it was 10,434 from small pox; 9,326 from measles, and 19,816 from scarlet fever.

Statistics bring out startling conclusions. We are in haste to assume that our remedial and hygienic measures have wrought great changes in the results of disease, and that the average mortality of the species is growing annually less. But alas! these figures teach us a different lesson. As one avenue to death is closed, another opens. Vaccination bade fair, for a time, to blot out small pox from the list of human infirmities; but "the blessings of vaccination are met and counterbalanced by the law of vicarious mortality." It would seem to be a law of nature, using the words of Dr. Gregory, "that the weak plants of a nursery must be weeded out." If weakly children do not fall victims to small pox, they live to fall into the jaws

of tyrants scarcely less inexorable. Scarlet fever and measles are both advancing in respect of mortality, and the increase of deaths by whooping cough since this century set in, is quite extraordinary." Statistics prove, as remarked by Dr. Bulkley, that the per centage of deaths under five years of age is rather on the increase than the contrary, in cities at least; or, to speak most favorably, remains about stationary.

Statistics show that this law is of wide application, and holds good of other than exanthematous diseases. The mortality of any given city or country varies, from year to year, much less than is generally believed, and is even much less affected than we are apt to conclude by great epidemics. When these prevail other diseases fall off, and "if men die of cholera, or children of small pox, they are not left to the prey of pneumonia, or of hydrocephalus, of asthma or of croup."

The peculiarities of exanthematous diseases are the following:—the eruption, the universal susceptibility, the non-recurrence, the contagion, the epidemic diffusion. In common with most other diseases, they are generally attended with fever; but this phenomenon is not always present, and so far from being necessary to the natural process of the complaint, violence of initiatory fever is always injurious. It disturbs the regular march of the exanthem, and one of the chief offices of the physician is to subdue it, in order that the eruption may appear, and the disease have a chance of running a safe course.

As, then, there may be eruption without fever, it may be asked, "may there not be the specific fever of an exanthematous poison without eruption?" Can a man go through small pox or measles without exhibiting eruption? An affirmative answer has been given by eminent observers, and a recent epidemic of measles in Paris seems to have created an extensive impression that the constitu-

tional symptoms of the disease may occur without the eruption; but the "pathology" is regarded by Dr. Gregory as "very questionable."

The law of universal susceptibility is an interesting character of eruptive fevers. One may expect to go through life without experiencing the pain of a great number of complaints, but every one counts on an attack of measles, and only expects to escape small pox by means of vaccination. Willis says, "that the escape of a man living to the ordinary period of human life from small pox and measles, is as rare as the falling into them twice." Some, however, do escape, as some are twice affected, and, what is a still more curious fact, there are some countries in the world in which the exanthemata are still strangers. Small pox, measles, and scarlet fever, according to the testimony of medical travelers, are to this day unknown in Australia and Van Diemen's Land—these countries of strange productions—the land of the marsupialia, of the ornithorynchus, and of black swans, being also impressed with the physical qualities which exclude this branch of "the painful family of death."

"Non-recurrence" is another feature of the exanthemata, but is not a universal law, for instances of second attacks of measles and small pox are but too well established. The law holds good in respect to other disorders than the exanthematous, and though not as true of yellow, typhus, and scarlet fever, as of small pox, the testimony of all observers is that those who have once suffered with these fevers are in slight danger of a second attack. But we cannot agree with Dr. Gregory, that "it belongs in a certain limited degree to fevers of a paludal origin." On the contrary, it has appeared to us that the oftener one has had remittent or intermittent fever, the more prone he is to such attacks. And so far from being true, as he contends, that "in all cases the susceptibility of a disease is more or less exhausted by once undergoing it," we have

always supposed that the tendency to certain complaints was increased by each recurrence. Pneumonia, for example, we had thought was more apt to occur for having once been excited, just as the joint once dislocated is more easily displaced ever afterwards.

The last characteristic of the exanthemata but one, is their "contagious origin," and that they operate upon the healthy body without the aid of predisposing causes. A man in the most perfect health contracts measles or small pox as readily as one enfeebled by previous disease, and such a state of his system is the fittest by far for insuring the success of vaccination. The poison of these diseases seems to originate in the blood, and to be communicable directly by the blood, without the agency of secretion. Glanders is communicated to a healthy horse by the injection of the blood of a glandered horse into his veins; and the same has lately been proved to be true of measles by experiments in Austria, in so many cases that no ground is left for skepticism on the subject. But they are communicable by other modes.

"All miasms of animal origin are capable of attaching themselves to fomites, and (provided they be excluded from the air) of retaining their communicating property for a considerable length of time. This great law of nature is the foundation of that important practical measure —quarantine. It is a law of universal application. Tinea capitis spreads by means of hats, combs and brushes; Egyptian ophthalmia by towels and sponges; small pox and typhus by clothes and bedding; plague by personal apparel and old rags. Some would persuade us that merchandise, which, *ex necessitate rei*, could never have been near the chambers of the sick, or handled by others than by men in health, may also communicate contagion; but I believe this doctrine to be opposed to every principle in sound pathology."

All the evidence respecting the propagation of cholera appears to us to be tending to the same point. The facts going to show that it is *portable* are multiplying every

day. It does not always go abroad with those who have been in the midst of it; it is not invariably transported by those who have been exposed to the infection. Far otherwise; in a large majority of cases, those who have breathed the pestilential air, and been with the sick and dying, fail to disseminate it; but still when disseminated, it seems to be through the same agency which diffuses the poison of the exanthemata. The striking difference between cholera and these contagious diseases is, that they require no favoring influences to propagate them, while it only spreads when the infection is transported to a favorable soil. Cholera must have adjuvants, and hence so often fails to spread where the poison exists. Small pox and measles are wholly independent of climate, soil, or season.

The other character of the exanthemata mentioned by Dr. G. is their occurrence as epidemics. Small pox has been repeatedly epidemic in this country, during the last few years, and in that form is more fatal than when only occasional cases are occurring. Dr. Bulkley remarks that,

"Epidemic diseases seem to be more fatal among the uncivilized than the civilized. In an epidemic of Rubeola among the Crees (a tribe of North American Indians) in the summer of 1846, as reported by Dr. Smellie (*Monthly Journal of Medical Science*, December, 1846), in 145 cases treated in their camp, 40 were fatal.

"Small pox has sometimes swept off an entire tribe of Indians, as was the case with the Mandans (another North American tribe), and has been raging with great fatality among some other tribes of these Indians during the past and present year.

"These races ascribe epidemics to spells exerted by their enemies, or regard them as direct visitations of the Great Spirit, and abandon all hope of recovery as soon as attacked.

"They seem also to differ in the degree of their mortality among blacks, small pox, measles, and hooping cough, being more fatal to them than to whites, while scarlet fever would seem to be more fatal to whites.

"In Charleston, (S. C.), the mortality by small pox during the period from 1822 to 1848 inclusive, was 49 among the white population and 154 among the blacks. Within the same period, 289 whites and 163 blacks died with scarlet fever, and 45 whites and 97 blacks died with measles; and 100 whites and 257 blacks with hooping cough,—the population of the whites being 12,828, and of the blacks 17,461, in 1830; and 13,000 whites, to 16,-200 blacks, in 1840."

Exanthematic debility, Dr. Gregory remarks, is apt to be mistaken, and to lead to bad practice. The debility most generally depends upon secondary fever, and is to be treated, not by beef-tea, wine, bark and tonics, but like other fevers, by purgatives, diuretics and low diet.

Dr. Gregory thus concludes his general remarks on the exanthemata:

"When all is done, you will not fail to remark how small a proportion the strictly therapeutical and practical parts of the course bear to the descriptive and pathological portions; it will often remind you of Falstaff's *ha'porth* of bread to his two gallons of sack. Remember, however, that in the exact proportion in which we improve the two latter, we diminish not the importance, but the extent, of the former. In the early periods of medicine, when descriptions of disease were imperfect, and pathology was in its infancy, and statistics were unknown, physicians arrogated to themselves a power of controlling, by drugs, the course of diseases (and especially of exanthematic diseases), which we now know to be wholly unwarranted. Pages and chapters were devoted to objects quite unattainable; presenting, indeed, an imposing, but a vain parade of learning. In this respect we have improved upon our predecessors. We are not ashamed to acknowledge that many diseases *must* run their stated course, and that others will run their course, in defiance of all the efforts of medical skill. In the management of the exanthemata, be satisfied with steering the ship. Do not attempt to quell the storm. Trophilus, an ancient Greek physician, being asked who was the most perfect physician, replied, "He who knows best how to distinguish that which can from that which cannot be done." "

The three following lectures are devoted to small pox, the first opening with a brief sketch of the early history of the disease. Dr. Gregory does not believe from all he has read on the subject, that small pox was known to the Greeks and Romans, and it is certainly a pretty strong argument in favor of this opinion, that in the writings of Alexander Trallianus, who attempted to give a description of the whole circle of medical science as it existed in the sixth century, no allusion is made to any complaint exhibiting the character of variola. Rhazes described it with great clearness in the year 910, and he is the first author who mentions it, though there can be no doubt that the disorder had been known for several centuries before it was described. Originating in the east, in the countries bordering on the Red Sea, it travelled to the west, and reached England about the close of the ninth century. "The word variola," says our author, "is to be found in several Latin manuscripts preserved in the British Museum, of date decidedly prior to 900." It reached our continent about 1527—according to Humboldt, in 1520—having been introduced by a negro slave into Mexico, whence it spread in all directions. In 1633, the Indians of Massachusetts were invaded by the fatal disease, which swept them away by thousands. It unfortunately happened that about this period, the hot or sweating system in the treatment of fevers had attained its acme, and as the method was deemed especially applicable to small pox, it is but too evident that the appliances of medical art conspired with the disease to swell its mortality. We realize with some difficulty at this day the monstrous absurdity of that system, a specimen of which we present as a curiosity. It is from Diembroeck, and runs thus as quoted by Dr. Gregory:

"Keep the patient in a chamber close shut. If it be winter, let the air be corrected by large fires. Take care that no cold gets to the patient's bed. Cover him over

with blankets. Red blankets have always been preferred —not that the color is material—but because, in the times of our ancestors, all the best, thickest, and warmest blankets, were dyed red. Never shift the patient's linen till after the fourteenth day, for fear of striking in the pock, to the irrecoverable ruin of the patient. Far better is it to let the patient bear with the stench, than to let him change his linen, and thus be the cause of his own death. Nevertheless, if a change be absolutely necessary, be sure that he puts on the foul linen that he put off before he fell sick, and, above all things, take care that this supply of semi-clean linen be well warmed. Sudorific expulsives are, in the meantime, to be given plentifully, such as treacle, pearls, and saffron."

It may be questioned whether the brilliant discovery of vaccination by Jenner, some years later, was a greater benefaction to the race than the cooling plan of practice introduced and established by Sydenham. But we dismiss the history of small pox with one more quotation, simply remarking that the sketch of our author though condensed is yet a pleasing one:

"In 1798, Dr. Jenner announced the discovery of vaccination. On the 5th of May, 1808, the inoculation of out-patients was discontinued at the Small Pox Hospital. On the 20th of June, 1822, inoculation was discontinued to in-patients. On the 23d July, 1840, the practice of inoculation, the introduction of which has conferred immortality on the name of Lady Mary W. Montague, which had been sanctioned by the College of Physicians, which had saved the lives of many kings, queens, and princes, and of thousands of their subjects, during the greater part of the preceding century, was declared illegal by the English parliament, and all offenders were to be sent to prison, with a good chance of the treadmill. It is even provided that an attempt to produce small pox by inoculation, even though unsuccessful (including, of course, the testing of vaccinated subjects at all ages), is an offence at law! Such are the reverses of fortune to which all sublunary things are doomed."

Nor shall we stop to give any account of the character of the eruptive fever, the pustule, the maturative stage,

or the various complications of small pox, all of which are treated at length and with clearness, but proceed to condense some of the statistics of the disease.

The statistics of small pox have attracted attention from the earliest periods, and the old English bills of mortality, it is said, can be trusted to more in it and plague, than in any other disorder. They "give 199,665 as the total amount of deaths by small pox in London, during the last century, of whom 97,546 perished in the first half, and 102,119 in the second half." Anterior to the discovery of vaccination, "the proportion of the mortality by small pox to the total mortality was as 8 to 100 in London," and there is no reason to doubt that it was less in other parts of the kingdom.

Children, in all ages, have been the greatest sufferers from small pox. Haygarth computed, in 1795, that it carried off half the children that died, at Chester, below ten years of age; and from reports lately made to Parliament it appears that, "out of every nine persons who now die of small pox in England, seven are below the age of five years." Of 758 persons who died of this disease in New York, from the year 1840 to 1844, inclusive, 411 were under five, and 486 under ten years of age.

Notwithstanding all that vaccination has done, it was found by the registrar-general that there were still only four diseases which, in England, stood before small pox, "with reference to the actual amount of mortality," namely, consumption, convulsions, typhus fever and pneumonia. Taking the world over, Dr. Gregory estimates the average mortality by small pox "at one in six of those attacked," and this in spite of all the improvements in regimen and medical treatment.

It is an interesting question how far the character of the disease has been modified by vaccination, and tables illustrative of this are given by our author, from one of which we gather that "among 396 unprotected cases,

there were only 23 which were mild in their aspect; while out of 298 vaccinated subjects, there were no less than 134 which presented, from the onset, favorable appearances, independent of 66, which displayed modification during the maturative stage." Other tables show, that of 6,222 persons admitted into the small pox hospitals of England, in 21 years, 2,530 had been vaccinated; and that while but 164 of this number died the total number of deaths was 1,530, or 1,366 among the unprotected. The result of the whole is, that "small pox in the unvaccinated is five times more fatal than it is in those who have previously undergone vaccination." But these statistics, while they prove that the danger of the disease is greatly mitigated by vaccination, establish the fact, that the idea of banishing it from the earth by vaccine inoculation is indeed, as our author expresses it, "vain and illusory."

Dr. Gregory holds to the doctrine, that the protective power of cow pox is complete for a given period but diminishes later in life. He says:

"It is a matter of general notoriety that small pox is very seldom taken by vaccinated children who are under the age of eight years. In the course of a long experience at the Small Pox Hospital, I have never seen more than three or four instances of such an occurrence."

He does not however believe, that this diminution takes place in all cases, nor does he pretend to give the proportion of such cases to those in which the protection is complete.

"But though this be impossible, there seems no reason why we should not attempt to ascertain the laws which affect and limit that power of resistance to the variolous virus which cow pox displays in so many instances, and so remarkably in infantile life. I have mentioned puberty as a disturbing cause. I have no doubt that others exist, of equal, perhaps of superior efficacy. Among them may be mentioned change of climate, which appears to have a very marked influence, sufficient to induce us to recommend the re-vaccination of all young people going to or

returning from India. A severe fever, in like manner, may so alter and modify the general mass of fluids as to open a door to the reception of the variolous effluvium. Importance should be attached also to the epidemic constitution of the season. It is certain that persons who under common circumstances have, through the agency of the cow pox, resisted the variolous miasm, succumb to it under epidemic visitation."

It becomes, therefore, a question of the most serious import, whether re-vaccination will renew the immunity from small pox. The physicians of Germany have been strenuous advocates for the practice, and assuredly they are not without experience to sustain them in it. Thus, they report 14,384 cases of re-vaccination among soldiers without a case of variola in a space of five years; and 26,864 civilians re-vaccinated, with only three cases of small pox in the same period. During an epidemic small pox in Copenhagen extending through several years, they state that "not a single instance of variolous or varioloid disease was observed among any who had been re-vaccinated." Many similar instances might be cited, but it is unnecessary. The operation, to say the least of it, is almost always a harmless one, and there can be no objection to its performance.

Whether small pox ever originates spontaneously, or is not dependent in every case upon a specific virus, is a question that cannot yet be said to be fully settled. That the poison sprung originally from "some fortuitous combination of common causes," as Boerhaave held—that, in other words, it began without *contagion*, there can be no doubt; and if it commenced thus, there is certainly a possibility that it may in this manner occasionally spring up again, but the contingency is not a probable one, and we incline to the theory of *an invariable origin from contagion*. But while adopting this view, we are not to lose sight of the facts which connect it with other epidemic maladies, for that it partakes of this character is as indisputable as

that it is contagious. In the last hundred years it has prevailed six times in London in a form eminently epidemic, and from the year 1649 to 1764, according to Webster, it has appeared epidemically nine times in Boston. More than once it has followed cholera as an epidemic in some of the large cities of our country, and prevailed in this place, to a considerable extent last autumn and winter after the disappearance of that disease.

We may advert to another question, rather curious than practical, before dismissing this subject; namely, the identity of small pox and cow pox. It is known to have been a favorite notion of Jenner, that cow pox is the parent of variola—that small pox is vaccinia converted into a malignant form by time and unfavorable circumstances; and this has been the generally received opinion on the subject. But the facts upon the whole, appear to us to be opposed to it, and we agree with our author that, instead of being identical, cow pox and small pox "are antagonist affections, striving to gain the mastery of the human frame, and each under different circumstances and at different times, proving successful;"—that, as expressed by M. Bousquet, "there is no identity of nature, but a reciprocity of action." At the same time, we are aware that there are those of high authority who consider that the question is settled in favor of the identity of the two affections, and who hold that this fact supplies a powerful argument in favor of vaccination.

We have seen what is the actual amount of the protection which vaccination affords; we have seen that it is very great—that small pox in the vaccinated is five times less fatal than in those who are unprotected; but we have also seen, as is now universally admitted, that the loathsome disease will come, in very many cases, in spite of vaccination. With the protection now afforded by the prophylaxis, Dr. Gregory thinks we "must rest satisfied." He does not believe the result will be affected "by any addi-

tional precautions on the part of vaccinators," or any "alteration in the kind of lymph employed." And this leads him to propound the following serious question—whether we might not find in adult inoculation a better mode of testing and improving the security of the vaccinated? Upon which he goes on to remark:

"Small pox, taken casually after vaccination, proves fatal, as we have seen, at the rate of seven per cent Inoculated small pox proved fatal, in former times, at the rate of only one-fifth per cent., or one in five hundred. As regards the extension of small pox from the practice of inoculation, no real danger need be apprehended. The experience of ten years in England has amply demonstrated that the diffusion of small pox is wholly independent of such artificial propagation. Small pox has been as general in England since inoculation was abolished as it was previously. But it is as yet little known, that small pox may be received into and pass through the system without producing either fever or eruption. I inoculated three of my own children at the respective ages of twelve, thirteen, and fourteen, after successful vaccination in infancy, and the result was as follows:—In two, local affection without any fever or eruption. In the third case, local affection without fever, but with papular eruption on the seventh day, not advancing to vesicles. I firmly believe that these children are now, and will remain through life, unsusceptible of small pox. The advantages derivable from such a course of procedure are these:—If the child's constitution be under the full vaccine influence, no effect will follow. If the vaccine influence be subsiding or altogether lost, then the small pox will be taken at the period of life (puberty) most favorable for safety, instead of being received (as too often happens under the present system) under circumstances the most unfavorable,—for instance, by mothers at the period of parturition, by young women on the eve of marriage, or by young men at a distance from their friends. The state of the law in England prohibits the practice here; but I hope it will be tried in other countries, where the judgments of medical men are less fettered."

We have dwelt at so much length upon these interest-

ing topics, that we shall be obliged to pass hurriedly over the remaining subjects of these lectures. These are Measles, Scarlatina, Erysipelas, Vesicular Eruptions, and non-contagious efflorescences, to which much valuable matter is added by the editor in the form of an appendix.

It is the prevalent belief among our best medical historians, that measles began to spread through the world about the same time as small pox, and that it arose in the same countries whence the variolous poison had its origin. The miasm, Dr. G. believes, is invariably received by the mode of infection. For a long time it was held by medical men to be identical with the poison of small pox, as scarlatina and measles were regarded as modifications of the same affection until comparatively a late period. Sydenham attacked successfully the former notion, and at the present day no physician believes that the latter complaints originate in a common infection.

Pneumonia is one of the most formidable complications of measles; it occurs both in the progress of the eruption and during its decline. Dr. G. remarks:

"It is a slow, creeping, insidious form of inflammation, which too often throws the practitioner off his guard. No positive complaint is made. The child droops, and appears weak and exhausted. Imagining that the disorder has weakened his patient, the practitioner directs some mild tonic. Meanwhile, pneumonic engorgement (or pneumonia in its first stage) creeps on. The lungs become more and more congested, and at length solidified. A convulsive fit now takes place. Alarm is taken, and leeches are applied, but the mischief is irreparable. Dyspnœa increases. The child becomes drowsy, the feet cold. The pulse sinks. Fluid effusion now takes place from the bronchial membrane. Another and another fit succeeds. Rattles are heard in the throat. The child dies!"

A physician who is on his guard will detect this latent inflammation, and at least not suffer it to proceed to a fatal termination without an effort to save his little patient. But there is an inflammation of a different kind, in which tubercles are developed and small ab-

scesses formed—in which the child becomes emaciated, consumptive, and dies. Dr. Gregory believes, that nine-tenths of the deaths by measles occur in consequence of this subacute form of pneumonia.

Few complaints vary more in intensity than scarlet fever. It is sometimes the mildest, and again the most malignant of diseases. Often the patient passes through it with only the slightest indisposition; in other cases it hurries its victims off with the suddenness of epidemic cholera. It is a fever sometimes typhoid, at others inflammatory, but always to be dreaded when it assumes the form of an epidemic. There can be no question that it is an increasing malady in our country, but happily not yet, like measles, one which all persons may expect to experience sometime in the course of their lives. From a number of observations quoted by Dr. Gregory, it appears that the medium rate of mortality by scarlet fever in Great Britain is six per cent., upon which he remarks:

"What a picture may be thence drawn of the actual extent of scarlet fever in years of epidemic prevalence! It shows that in London, in 1839, there were 41,650 cases of this disease; while throughout England and Wales, in 1840, when 19,816 persons died, the total number of seizures must have reached the almost incredible number of 330,266."

In a large proportion of cases, Dr. Gregory believes that scarlatina is the produce of a specific poison; but he admits that it may arise from other causes. He seems not to attach the slightest importance to belladonna as a preventive of this disease, not even so much as alluding to it. His remarks on the treatment of scarlet fever are judicious and valuable, but we must pass them over for want of room; as indeed we are compelled to do the remaining parts of this interesting work. In taking leave of it, we would cordially recommend it to our readers, as the production of a man who has thoroughly investigated the subjects of which it treats. We have risen

from the perusal of it with a high appreciation of the author's judgment, learning and ability. Y.

ART. IV.—*A Practical Treatise on the Diseases and Injuries of the Urinary Bladder, the Prostrate Gland, and the Urethra. By* S. D. GROSS, M. D., Professor of Surgery in the University of Louisville, Member of the American Medical Association; author of Elements of Pathological Anatomy, etc. etc. With one hundred and six illustrations. Philadelphia: Blanchard & Lea. 1851. pp. 726. 8vo.

There are few subjects in medical science involved in greater obscurity than the formation of urinary calculi; at the same time it is one which awakens the liveliest interest in the minds of medical men, in a region more especially where the disease is of such common occurrence as it is in the western States. It is a fact now well established that no country of the same population furnishes a larger number of cases of stone than that known as the Valley of the Mississippi. Kentucky, Tennessee, Ohio, and Alabama are said by Dr. Gross to afford a greater number of cases of this disorder than any other portions of the United States. Next to these, are ranked Pennsylvania, Virginia, Maryland, the two Carolinas, Georgia, Florida, Louisiana and Arkansas, while the inhabitants of Missouri, Iowa, Wisconsin, Michigan, Indiana, New York, and New Jersey are comparatively exempt; and in the New England States generally a case of calculus of the bladder is exceedingly rare. Our author is led to believe that the same is true of the Canadas, Texas, Mexico and California.

We suspect that there is some error in this estimate, and that it will turn out that Missouri at least, of the north-western States, has furnished her quota of cases for the lithotomist. Statistics when they come to be col-

lected, we incline to believe, will show that this State ranks quite as high in this respect as Alabama, and higher than the Carolinas, Louisiana, Georgia, Arkansas or Florida. Climate, water, food, and the habits of the people have all been invoked to explain these differences; but up to this time we have to confess that the cause has not been ascertained. What Dr. Gross says of the operation of climate in the formation of urinary calculi is as true of most of the other alleged causes of stone---that their agency is "mysterious." The question is one of great interest, and is at present attracting much attention. Dr. Gross adverts to the opinion that limestone water promotes calculous diseases, and remarks:

"The opinion is plausible, and may be true, but how far, or to what extent, nobody has attempted to decide. If it be true that in Kentucky, Alabama, Tennessee, and Ohio, most calculous cases occur in limestone regions, it is equally true that many are found in the freestone districts of those States."

He might have added, that there is as much limestone in Indiana as in Kentucky, and that it is also an extensive formation in Missouri and the north-western States, in which urinary calculi are said rarely to occur.

About twenty years ago, Mr. Crosse, in an essay on urinary calculus, announced that the great and prevailing source of urinary deposits in the human body is *dyspepsia*, leading to the generation of acid in the stomach and of lithic acid in the urine. It will not be denied that all those articles which have a tendency to create acidity and flatulence, must exert a deleterious influence upon the urinary secretion, changing its properties, and promoting the deposition of earthy matter. But we hold that no one is warranted in saying that, because these articles produce such effects upon the digestive organs they therefore induce calculous diseases; for although dyspepsia prevails extensively in that portion of the United States in which vesical calculus is most frequently observed, it is not

less prevalent in Maine, and in the northern States generally, where cases of stone are seldom seen. That the two diseases often, perhaps most generally, exist in the same individual cannot be doubted; but that other causes than disturbance of the digestive functions are necessary to develope the urinary concretion is a fact we think fully established.

Whatever for any length of time, intercepts the free evacuation of the urine favors the formation of stone in the bladder; and hence stricture of the urethra, one of the most common and powerful interruptions, organic disease of the bladder, ureters, and kidneys, and enlargement of the prostate, may be stated as among the most frequent predisposing causes. When an inordinate secretion of mucus is associated with the mechanical obstruction, the liability to stone is greatly increased from the fact, that more or less of the solid constituents of the urine is retained in the bottom of the bladder, where it often becomes the nucleus of a future concretion.

The second section treats of the physical and chemical properties of vesical urinary calculi, and embraces some curious and interesting facts.

Upon our knowledge of the chemical constitution of calculi depends our ability to correct the diathesis and prevent the urinary concretion, and as this knowledge is obtained through the assistance of the chemist, we regret that Dr. Gross has not submitted the many beautiful specimens of calculi in his possession to analysis, and made known the results.

The volume of urinary concretions appears to be in a great degree determined by their chemical composition; and we may consequently, by ascertaining the calculous diathesis of a patient, form a tolerably correct idea of the size of the stone under which he is laboring.

The symptoms of stone are *rational* and *physical*. The rational symptoms are numerous and diversified in char-

acter, and are described with great minuteness, and in a manner calculated to enable the merest tyro in surgery to detect, as far as it is possible to do so by rational signs, the presence of a calculus. It is well known however, that these symptoms alone, even though all be clearly present, are not sufficient to impart certainty in such cases. It is only by the physical signs—by the well known, the pathognomonic *click*, caused by the collision of the metallic sound and the stone, and which the contact of no other bodies in the bladder can produce, that the existence of a calculus is converted from a mere probability into a tangible reality. Cases have occurred in the hands of the most experienced and accomplished lithotomists in which, notwithstanding the presence of both the rational and physical signs, calculous disease did not exist; and other cases are reported in which a stone was apparently detected, and yet when the patient was cut, it could not be found. The latter accident has happened on two different occasions in the practice of a surgeon of this city. In the first instance, the patient a little boy, survived, and is still living. The other, an old man, died from the effects of the operation, and on examination, the bladder was found to contain nothing but a fungous tumor, portions of which had repeatedly come away during life. For the purpose of preventing a repetition of such deplorable mistakes, Dr. Gross has indicated their sources, and if his remarks are as carefully studied as they deserve to be, this reproach to surgery will not happen among his readers.

Sounds, the operation, dangers and errors of sounding, latent stone, the symptoms produced by an irritable bladder, and sympathetic irritation and the pathological effects of stone, are the remaining subjects discussed before the author arrives at the treatment of urinary calculi:

"Persons affected with stone do not always find it convenient to submit to the operation of lithotomy, and it

becomes a matter therefore, of great importance to render them as comfortable as their circumstances may admit of."

By appropriate and well directed treatment, by attention to the general health, as regulated by food, drink and exercise, much may be done to allay local suffering, and even in some instances make the patient forget his disease. In reference to this subject—the medical treatment of stone—our author has some practical and judicious remarks. When the urine is decidedly alkaline, acids are generally indicated, and of these Dr. Gross prefers the nitric to any other acid. In certain cases, marked relief follows the use of citric, and tartaric acids, and in others again, phosphoric acid has seemed to exert a better influence. If the urine be acid, alkalis are of course required. The bicarbonates of soda and potassa, exhibited three or four times a day in the proportion of thirty grains to the ounce of strong hop and uva ursi tea produce a most soothing effect in these affections. In fact, whatever be the diathesis or nature of the concretion, Dr. Gross has generally derived most benefit from the use of alkaline remedies, of which he regards soda as superior to any other. The practice of using the acids and alkalis alternately has been followed by better results in his hands than the protracted use of either alone.

The improvement thus produced has in some instances lasted for years, though, generally, it has been of but short duration. Dr. Gross has never attempted either by injections or galvanic electricity to dissolve stone in the bladder. In the section on lithotripsy he pays a just tribute to its inventor, M. Civiale, and expresses surprise that in a country abounding as ours does in calculous diseases this operation should have been so seldom performed, and that so few surgeons should have made it their special study. It is hardly necessary to remark that to crush the calculus is not always practicable, nor is it always desira-

ble. There are cases in which it cannot be accomplished, and others, again, in which it ought not be; and though there are cases in which it is a far superior operation to lithotomy, there are cases in which it is far inferior. The advantages and disadvantages of the operation are fairly exhibited. To the patient, the operation of crushing the stone appears much less formidable than that by the knife, while in reality it is so in but comparatively a small number of cases. Lithotripsy, even when executed by the hand of a master, and upon a choice subject, is obnoxious to serious objections, and may be followed by a number of bad effects; among which we may mention, hemorrhage, rigors and fever, retention of urine, contusion and laceration of the prostate and urethra, cystitis, perforation of the bladder, impaction of the stone in the urethra, peritonitis, and bending and fracture of the lithotriptor.

To this succeeds a section on lithotomy, which we regard as the ablest paper on that subject extant, and of which we propose to give as full an account as our limits will permit.

Of the several methods of lithotomy in vogue in this and other countries, Dr. Gross gives the preference to the lateral section. "I have," he says, "been so much wedded to the lateral method, that I have never felt inclined to employ any other." The wonder to us is, that the whole surgical world does not feel as he does.

The safety of the operation of lithotomy may be said to hinge upon the extent of the incision into the prostate gland. "That the division should always be as limited as it can be conveniently with the safe and easy extraction of the foreign body" is the canon of most modern lithotomists, and one to which our author has never had occasion to regret a strict adherence. Very partially to cut the prostate and to complete the opening by dillitation is stated by Mr. Skey to be "the golden rule." "The wound should in no instance, however bulky the stone may be, extend

entirely through the lateral lobe of the prostate." If the stone be unusually large, the opening should be enlarged by incising the opposite half of the gland. "Where the foreign body is of moderate dimensions, incise the gland to a very limited extent, and immediately after enlarge the opening with the finger." When this is not sufficient, "the probe-pointed bistoury is a substitute. It is remarkable how lacerable the organ is in children and adolescents, and to what extent it may be torn, without endangering the parts by infiltration."

Our author holds very different language in relation to the outer wound:

"While the internal should always be small, the external can scarcely be too large, or too free and dependent. The extent of the outer wound should never be less, in the adult, than three inches to three inches and a half; in very young subjects it must, of course, be proportionably limited, but even in them it should rarely be less than two inches and a quarter."

While hemorrhage is of rare occurrence when the pelvis is of the ordinary width, the vessels of the perineum perfectly regular both as respects their distribution and volume, and the proper caution is observed in performing the operation, it occasionally, under an opposite condition of things, becomes one of the most serious accidents attending perineal lithotomy. Dr. Gross does not think with the late Mr. Key and others, that the artery of the bulb—one of the principal sources of hemorrhage—is almost always divided in the lateral operation, "for the reason, that, if this were the case, the mortality from this operation would be much greater than it is."

In order to overcome the difficulty which is frequently experienced in ascertaining whence the blood proceeds, Dr. Gross suggests that a small wire speculum might do good service in the exploration which, under such circumstances, it is always necessary to make.

Our author has no partiality for compression, as a

means of arresting hemorrhage, and declares that he never resorts to it but with extreme reluctance.

The circumstances which determine the time consumed in performing the operation of lithotomy, are too well known to require repetition here. One thing, however, in regard to it is settled, to wit: that "no lithotomist should cut against time." The dissecting room rule, of cutting freely so as to effect a rapid operation, and meet with no difficulty to the extraction of the calculus, is not sanctioned by the experienced and practical teacher. The most successful lithotomists have not always been the quickest operators—the quickest operations have not been found the most successful. We once saw Dr. Gross remove a stone in thirty seconds, and we are acquainted with another surgeon who can boast of the same brilliant feat. The surgeon's motto in this, as indeed in all other operations, should and must be, if he would gain many triumphs without the loss of many lives, "*festina lente*."

Dr. Gross condemns the practice of introducing a tube into the bladder by the wound for the purpose of conducting off the urine, and thereby guarding against infiltration of the cellular tissue, and pronounces it to be not only "useless in reference to the object proposed, but eminently calculated to prove mischievous, and never either necessary or proper except where the incisions have been made unusually extensive." We agree with him in this opinion.

"The treatment after the operation must be strictly antiphlogistic. The patient is kept quietly upon his back, and all excitement, both bodily and mental, is sedulously guarded against. The pain consequent upon the operation is often extremely severe, and is generally referred to the neck of the bladder. It is of a cutting, darting, or burning character, and is either continued, or it comes on in frequent paroxysms. It generally makes its appearance immediately after the operation, and is sometimes so severe as to cause the patient to scream out at the top of his voice. To arrest this suffering as speedily as possible, as well as to allay the general agitation which is so

frequent a concomitant of lithotomy, a full anodyne should be administered, generally within a few minutes after the patient has been removed to his bed. If he be an adult, he should take not less than one grain of morphia or its equivalent of solid opium or laudanum. To administer a smaller dose than this would only be temporizing. The pain must be allayed promptly and effectually, otherwise it may be productive of serious mischief, such as exhaustion, convulsions, or inflammation.

"Demulcent drinks should be used freely throughout the treatment, especially during the first few days. They not only allay thirst, but what is of great importance, they dilute the urine, and diminish its acrid qualities, thus rendering it more acceptable both to the bladder and the wound. They may consist of elm-bark water, flaxseed tea, or gum arabic water, and they may be simple, or combined with nitrate of potassa, bicarbonate of soda, or dilute nitric acid, according to the particular indication of each case.

"The diet must be light, unirritant, and of the most simple kind. For the first few days, the patient should take little else than water-panada, thin gruel, or weak chicken broth. After that he may use a little rice, toast and tea, a few crackers, or a small quantity of mush and milk. No meat or vegetables should be permitted under twelve days or a fortnight. It should be remembered that the slightest indiscretion in diet may greatly retard recovery, or even jeopard life. The patient should consider himself as an invalid, and govern his appetite accordingly. Of course, there are exceptions to all rules. Thus, a patient may be in such infirm health as to require a nourishing diet, tonics, and stimulants, from the very commencement of the after-treatment. Much judgment is doubtless required to enable the practitioner to decide when such a plan is proper, and it is obvious that no specific rules can be laid down for his government.

"In all cases I make it a rule to prevent any action of the bowels for the first three days. I have always pursued this practice under a conviction that the less the rectum is disturbed the better it will be for the bladder. For this purpose I invariably give a full anodyne immediately after the operation, even where it may not be necessary on account of the pain and general agitation. Where

care is taken to clear out the alimentary canal thoroughly before the operation, the patient cannot suffer any possible inconvenience from the want of an evacuation during the period here specified. At the end of this time I generally order a dose of castor oil, or Epsom salts, assisted, if the purgative is tardy in its action, by an enema of tepid soap-suds. The same, or other means, may be resorted to afterwards to keep the bowels in a soluble condition. If, during the progress of the case, the patient's tongue becomes coated, and his appetite impaired; or if his general health suffers; or he does not improve as well and as rapidly as he ought; or, finally, if the urinary secretion is loaded with mucus and earthy matter; the best remedy he can use is a dose of calomel, which often, in these circumstances, acts like a charm in promoting recovery.

"During the progress of the treatment, it sometimes happens that the edges of the wound become incrusted with earthy matter, forming a thin, whitish sheet, which adheres quite firmly to their surface. The occurrence is not productive of pain; but, as it prevents the formation of healthy granulations, it serves to retard the reunion of the parts, and should, therefore, be promptly attended to. The deposit is of a phosphatic character, and hence the best remedy is the nitric acid lotion, in the proportion of about four drops to the ounce of water, applied by means of a folded cloth. Where the incrustation extends far back, the fluid may be injected once or twice daily into the bladder. In most cases, the local application should be aided by the internal exhibition of the remedy."

Notwithstanding statistics play so large a part in most of the writings of medical men of the present day, Dr. Gross esteems those furnished by the results of the lateral operation so imperfect and unsatisfactory, that he has not taken the pains to collect them. This is to be regretted, for incomplete as these statistics are, they are nevertheless highly interesting, and we should have been gratified, as we are sure his readers generally would have been, if Dr. Gross had given the result of his extensive researches on the subject.

The fact, we believe, is unquestionable, that American surgeons have surpassed all others in this operation.

Much of their success is doubtless owing to the soundness of constitution and pure air enjoyed by the subjects of stone in this country; but something must also be ascribed to their judgment in preparing their patients for the operation and in the subsequent treatment.

Dr. Gross has performed the operation of lithotomy twenty-five times, and without the loss of a patient. A brief history of twenty-four cases is subjoined as a sort of appendix to the article on stone; the twenty-fifth case came under our author's observation while his work was in press. As we have been politely furnished by him with its details we shall include it in our summary.

The subject of every operation was a white male, and aged as follows:—Eleven were under ten years of age, and ranged thus: One of three years and two months; one of three years and a half; one of four years; one of four years and four months; one of five years; two of six years; one of seven years; one of seven and a half years; one of eight years and two months; and one of nine years. Five were between the ages of ten and twenty years, and are set down as follows: One of ten years and six months; two of twelve years; one of fourteen years; and one of seventeen years. Six were between twenty and thirty years of age: One of twenty; three of twenty-two; one of twenty-seven; and one of twenty-eight. The remaining three cases had attained the respective ages of thirty; sixty-five, and seventy-seven years.

The youngest subject operated on was only thirty-eight months old, while the most advanced had nearly reached four score years.

Dr. Gross performed his first operation for stone in February, 1841; and the last in April, 1851. Of the twenty-five cases, Kentucky furnished sixteen; Tennessee, three; Indiana, two; Illinois, one; Arkansas, one; Ireland, one; and Pennsylvania, one. The patient from Pennsylvania was aged twenty-eight years, and had resided eleven

years in Kentucky, during the last five of which only had he been affected with symptoms of stone.

The native of Ireland was a lad six years of age. He emigrated to this country when ten months old. After he reached America, he lived one year at Quebec, and afterwards, for twice that period at Pottsville, Pennsylvania. "He was always very healthy till he was two years of age, when he began to suffer from difficulty in voiding his urine, which gradually increased in severity up to the time of the operation." This was performed without accident in June, 1846, and the wound was completely healed by the seventeenth day. "The urine began to pass through the urethra on the fifth day, and on the ninth, it ceased to flow by the wound." Although the patient had a "rapid recovery, he has labored under incontinence of urine ever since the operation. The stone was hardly as as large as a common garden bean, and its weight was only five grains."

Mr. Martineau, of Norwich, England, once removed a calculus of ten grains, which was supposed to be the smallest ever extracted by operation. An ambition of the lithotomist may legitimately be to remove the largest stone, but to subject a patient to the dangers of the knife, and find only a single calculus whose weight may be counted by grains is, in most instances, very properly a source of regret. "If I could have ascertained before hand, in the above case, that the concretion was not larger than it proved to be after removal, I should certainly have performed lithotripsy instead of lithotomy." And so, we presume, would any body else.

The little boy of thirty-eight months old was relieved, in good time, of a concretion hardly as large as a common filbert, and in twenty-four days the wound had completely cicatrized. "For sometime after the operation the patient remained well; but by degrees he became thin and puny, and began to suffer from irritability of the bladder, with

frequent pains in the lumbar region. The symptoms gradually increased in violence, and he died in eighteen months from the time he was cut, in a state of excessive emaciation. On dissection, I found the bladder entirely sound and free from calculus deposit; the urethra also was healthy, and so was the right kidney. The left kidney was nearly twice the natural size, and contained a concretion nearly as large as an ordinary hazel nut; the organ adhered firmly to the outer surface of the descending colon, which was perforated by a small opening, the edges of which had a dark, gangrenous appearance."

In the patient aged twenty-seven years, untoward symptoms arose at the end of the third day, in the form of a troublesome diarrhea and an erysipelatous aspect of the wound, which in twenty-four hours after "gave vent to fecal matter, thus showing the existence of an opening between it and the bowel. That this communication was the result wholly of the sloughing process, and not from any improper interference of the knife," is evinced by the fact that Peters "had not less than eleven passages previously without anything issuing at the wound. The patient, whose pulse had become weak and faltering, was promptly put on calomel and opium, with quinine and milk punch, under the use of which he gradually regained his strength; the erysipelas slowly disappeared, and in less than four weeks the wound was entirely healed. When he left town, his general health was greatly improved, and the only inconvenience he experienced was a discharge, at long intervals, of a small quantity of urine by the rectum. I learned, several months after his return home, that the fistula had entirely closed, and that he was enjoying excellent health."

A phosphatic calculus, about the size of a pullet's egg, was extracted from Mr. Orrand, aet 30:

"No accident occurred during the operation; for some days the patient remained weak, and required porter

and a nourishing diet, but his flesh and strength gradually increased, and in three weeks the wound was nearly healed, all the urine being voided by the urethra. He went home early in January; for some time after he was much improved, but early in April, 1847, that is, fifteen months from the operation, his calculous symptoms returned, and his sufferings became nearly as great as ever. He now complained of great pain and weakness in the back, and constantly passed calcareous matter. When I last heard from him, his health was very bad, and no doubt existed as to the character of his disease."

The lad, aged four years and four months, had a good recovery, and left Louisville for his home in Indiana, the sixteenth day after the operation. For some weeks he improved very much in health, experienced but little pain in making water, and the wound healed almost entirely. This was early in July. Late in October information came, that the boy had been constantly getting worse for the last two months, and that he suffered quite as badly as before the operation, and serious fears were entertained, that there was a return of the disease. "Whether this was really the case, I am unable to say, as I have since received no further intelligence respecting him."

In three only of the cases operated on by Dr. Gross, was the hemorrhage sufficient to require treatment. The first occurred in a young man twenty years old, who had had symptoms of urinary disease since his childhood, and appeared to proceed from the superficial perineal. "In incising the skin and subcutaneous cellular tissue, I cut an artery, apparently the superficial perineal, which bled so copiously as to require immediate ligation; the blood issued with astonishing impetuosity, and with a peculiar whizzing noise."

In the second case, Dr. Gross was obliged to tie a small deep seated artery, which continued to bleed for some minutes.

The third and last case was that of a man, aged twen-

ty-eight years, in which the same artery was thought to be divided.

"The operation completed, I tied the divided artery, above mentioned, but found to my surprise, that the flow of blood, instead of being arrested, appeared at innumerable points on the surface of the wound. It was of a venous color, and led to the idea that it might proceed chiefly from the neck of the bladder. On cleaning the wound, however, it was found to ooze out, as above stated, at different points. The patient was put to bed in the hope that the hemorrhage would cease, but in this I was disappointed. He was now brought to the edge of the bed, and the wound carefully cleaned, to ascertain if possible, the source of the bleeding. Seeing no vessel from which it could proceed, I determined to introduce a large, soft piece of sponge, sufficiently long to reach the neck of the bladder, and then apply ice to the perinæum and hypogastrium. This had the effect of arresting the bleeding at once. The operation was performed at 10 o'clock in the forenoon; and the next morning at 8, upon removing the plug, the bleeding returned, the blood oozing out as before, and compelling me to reintroduce the sponge. This had again the desired effect; the plug was retained till the following Wednesday, when it was withdrawn, without a recurrence of the hemorrhage. In all other respects, things progressed favorably; there was a little fever for the first two days, and some tenderness in the wound, but nothing serious. It should be observed that the urine flowed freely through the wound by the side of the sponge, for the first twenty-four hours; afterwards most of it flowed along the urethra until the sponge was removed. Nearly three weeks elapsed before it passed through the urethra, and three months before the wound was entirely closed. Both these effects probably depended upon the use of the plug; for his general health was all the time excellent, and could hardly, in my judgment, have had any agency in retarding the healing process."

A remarkably interesting case, in many respects analogous to one already alluded to, is the following:

"Thomas Alexander, fourteen years of age, came to me on the 21st of November, 1849, from Henry county, Tennessee, with symptoms of stone in the bladder. With

the exception of two or three mild attacks of intermittent fever, which is common in his neighborhood, his general health was always good until several months ago. He lives in a freestone region, and is not aware that any of his immediate relatives have ever suffered from calculous disease. He has always, from early infancy, had difficulty in voiding his urine, which he has for some time past, been obliged to discharge every fifteen or twenty minutes, often mixed with blood. Within the last six months, he has passed several small concretions, and has suffered much from pain in the sacro-lumbar region. Being in good health upon his arrival in Louisville, I cut Thomas two days after, removing two stones, one of which, shaped somewhat like a squirrel's head, and as large as an ordinary apricot, projected in the neck of the bladder, and was extracted in thirty seconds from the moment the knife touched the integuments. The other was a little smaller, and was also promptly dislodged. No untoward symptoms occurred after the operation. On the 2d of December, the urine passed almost entirely through the natural channel, the wound was nearly closed, and the general health was gradually improving. On the 8th, he left for his home in Tennessee, in excellent condition, the opening being almost cicatrized, and permitting only a few drops of urine to escape through at a time. He was directed to live light, to pay attention to his bowels, and use an infusion, three or four times daily, of uva ursi and hops with bicarbonate of soda.

Soon after reaching home, Thomas was taken worse; there was a return of pain in the bladdder, and he had great, and incessant distress in the region of the kidneys; with violent tenesmus, and a frequent desire to micturate; in short, he had again all the symptoms of urinary calculus. The general health gradually declined, and the wound never entirely healed, owing to the constant passage of sabulous matter, and the adhesion of more or less of this to the sides of the opening. Every thing was done to mitigate his suffering, but to little purpose. Nothing but the most liberal use of anodynes afforded the slightest relief. In this condition, his father determined to put him on board a steamer, and revisit Louisville; he arrived in town on the 3d of October, 1850. Soon after leaving home, Thomas was seized with vomiting and

purging, followed in forty-eight hours, by symptoms of dysentery. He was unable to retain anything on his stomach; his thirst was excessive; and he had frequent discharges of blood and mucus. He had improved somewhat in flesh during the last two months; but since this attack he had become greatly emaciated. The case resisted all treatment, and he expired early in the morning of the 5th. A careful examination revealed the following facts.

"The fistula in the perinæum was of the diameter of a common probe, and was incrusted, nearly in its entire extent, by sabulous matter, a small quantity of which was visible at its external orifice, situated at the upper part of the cicatrice. The skin for some distance around the opening was red and excoriated, from the acrid nature of the discharges.

"The bladder was much contracted, and hardly capable of holding a pullet's egg; it contained no urine, but some purulent matter, and fifteen calculi, from the size of a mustard seed to that of a pea, irregular in their shape, of a white color, and rough on the surface. The mucous coat was considerably thickened, mammillated, and throughout of a slate color. Sabulous matter existed in abundance at the bottom of the vesical orifice of the fistula, and readily accounted for the want of union of the wound. The coats of the bladder were pale, firm, and nearly half an inch thick in the posterior half of the organ; but in front of this they were free from hypertrophy and and of the natural consistence. The urethra was healthy. The prostate gland was remarkably small, but of normal color and consistence.

"The ureters were of a pale drab color externally, unusually firm and large, and remarkably thickened in their coats; they contained each a small quantity of muco-purulent matter, intermixed with gritty substance. Their lining membrane was longitudinally corrugated, of a pale straw color, and considerably thickened. The renal extremities of both tubes were somewhat contracted.

"Both kidneys adhered with great firmness to the surrounding parts, and were imbedded in a small quantity of at. The right was somewhat hypertrophied, hard, and of a dusky hue externally; internally it was more pale; the calyces were enlarged, and filled with purulent matter

and grains of sand, with several small concretions similar to those found in the bladder. The left kidney was a little larger than the right; when pressed upon it grated, and felt like a bag of mortar; it was remarkably firm, and of a dusky color, and contained a large quantity of sabulous and stony matter. The mucous membrane of the pelvis and calyces was chronically inflamed. The right renal capsule was natural; the left had disappeared. The abdominal viscera were sound. The rest of the body was not examined."

It is a frequent subject of remark, that urinary calculus is a disease of such very rare occurrence among the African race. Of the two hundred individuals lithotomised by Dr. Dudley, only six are reported to have been negroes, and as we have elsewhere stated, all the subjects of Dr. Gross's operations were whites. We have received information of two cases of this affection in negroes; one living in Tennessee, and the other in this State.

The three examples which constitute the only approach among the whole number to anything like hereditary predisposition to stone are the following:—A man whose father and paternal uncle both had stone—an individual, whose maternal grandmother had stone—another, two of whose maternal uncles had voided small calculi on different occasions.

It was also in only three of the twenty-five cases, that Dr. Gross found more than a single concretion. From the patient aged 77, he extracted "fifty-four calculi, varyrying in size from that of a pea to that of a partridge egg. All, excepting one, seemed to be encysted at the superior fundus of the bladder, which was immensely elongated, extending nearly to a level with the umbilicus. The forceps and scoop were introduced at least thirty times, and not a little difficulty was experienced in rupturing the cyst and detaching the calculi." The second case—that of Thos. Alexander, has been already alluded to. From the third patient, operated on in April last, Dr. Gross remov-

ed three calculi, two situated in the urethra, the third occupying the bladder.

In some of the earlier cases recorded by our author, he has omitted to state the geological formation of the district of country in which the patients resided. After supplying this deficiency, we find that seventeen cases were from a limestone region; six lived in a sandstone region; one—the case from Pennsylvania, had used for several years before the earliest symptoms of stone were made manifest, the water of the Ohio and Mississippi rivers. The Irish boy had lived in Quebec, Pennsylvania, and Louisville, Kentucky. We have not been able to gather from his history as reported, whether or not he was living at the time of his first attack in a lime or a sandstone region. He had no symptoms of calculous disease however, until he had been about fourteen months in the United States.

The remaining sections of this chapter are devoted to a description of the several other modes of extracting urinary calculi, and are replete with very interesting details.

The first part of the work is concluded by a chapter on foreign bodies in the bladder. Part second embraces the *diseases and injuries of the prostate gland.* The various accidents and affections to which this gland is liable are treated of with the same fidelity which has characterised those portions of the work of which we have already spoken. Hypertrophy, abscess, and calculi of the prostate are illustrated by a number of striking figures. Part third is devoted to the *diseases and injuries of the urethra.* While speaking of stricture of the urethra, our author inculcates some principles which we commend to the attention of our readers:

"Before resorting to any of these expedients,"—dilatation, compression, cauterization, &c. &c., "it is of paramount importance, I conceive, to attend to the general health, and to subdue local inflammation. Unless this be done, the practitioner will run great risk of doing harm instead of good. To effect this object, the patient should

be kept in the recumbent posture for six or eight days previously to the intended operation; the bowels should be freely moved every forty-eight hours with some mild purgative; the secretions should be duly regulated; the diet should be light and unirritant; and recourse should be had occasionally to the warm bath. If there be any inflammation, irritation, or spasm of the urethra and the bladder, leeches must be applied to the perinæum, followed by fomentations and anodyne enemata. Demulcent drinks should also be used; and there are few cases which will not be benefited by the exhibition of bicarbonate of soda and balsam of copaiba. Too much stress cannot be placed upon this preliminary treatment; indeed, I should consider it highly culpable to neglect it under any circumstances. When the way has been thus paved, the particular kind of treatment is to be determined by a careful consideration of the nature of the obstruction. There are few points in surgery which require more judgment and experience than this.

"Some practitioners are in the habit of relying mainly, in their attempts to cure organic stricture, upon constitutional means, especially rigid abstinence, carried almost to starvation, and the daily use of nauseating doses of tartarized antimony, or the frequent exhibition of emetics; conjoined with rest in the recumbent posture, and the avoidance of all sources of bodily excitement. That such a mode of treatment is well calculated to allay vascular action, and promote the absorption of the effused lymph which gives rise to the obstruction, may be readily imagined; but any advantages thus accruing are generally more than counterbalanced by the hardships which attend it. In the callous form of the disease, such a proceeding must be perfectly futile; for there are few cases which can receive any permanent benefit from it, and in which it will not be more likely to wear out the patient than his stricture. Of a considerable number of persons whom I have known to be treated upon this principle, I do not recollect a single one that experienced any decisive or permanent relief, or that was willing again to submit to its exorbitant, unscientific, and injurious exactions."

Of dilatation he says:

"My conviction, founded upon ample experience, is, that the very best instrument for dilating a stricture is the

common silver catheter, with a slightly conical point. I have employed this instrument now in the treatment of this affection for upwards of twenty years, and nothing could induce me to abandon it. It possesses all the requisites that such an instrument ought to have, namely, lightness, firmness, and durability, and is incomparably superior, in every respect, to all the metallic, wax, gum-elastic, ivory, and other bougies that have ever been invented. In making this statement, I do not wish to be understood as saying that bougies are entirely worthless, or that they ought never to be used. If I were to do this, I should certainly do injustice to my judgment, and assert what is contrary to the experience of some of the ablest and most enlightened surgeons of the age, both in this country and in Europe. My desire is merely to recommend, in strong and decided terms, an instrument which is capable, as a general rule, of fulfilling every indication presented in this disease, even in its worst forms, and which, I am satisfied, is much less appreciated than it deserves to be."

"Cauterization, properly used, is a valuable curative agent; but, if indiscriminately employed, it is capable of doing serious, if not irreparable mischief. The circumstances to which it appears to be more particularly adapted, and to which, in my judgment, it ought to be restricted, are those in which the stricture, without being very tight or extensive, is of a firm, gristly, and resilient character, and in which there is an undue amount of morbid sensibility of the mucous membrane of the urethra. I never resort to it where the obstruction is either very slight or very great; for in the former case I have rarely failed to effect a cure by dilation, and in the latter I have almost always been obliged to have recourse to its division. It may be further observed that cauterization should seldom be relied upon alone, but that its action should always be aided by the bougie or catheter; a mode of proceeding which greatly expedites the cure, and affords an additional guarantee against relapse, which is so apt to occur when this precaution is omitted."

"The method by incision, as recommended and practised by Mr. Stafford and other surgeons has met with much opposition, and has even been denounced as barbarous and disgraceful. In such an opinion I cannot concur.

I have performed the operation too frequently not to be convinced of its efficacy, if not of its superiority over all other plans.

"When a stricture is very old, firm, and unyielding, or almost cartilaginous in its consistence, no mode of dilatation, however judiciously and perseveringly employed can succeed, either alone or in combination with cauterization, and in such a case I never hesitate to resort at once to incision, satisfied that nothing else will answer. I have repeatedly had under my charge patients who had been subjected to the treatment by dilation for months and months, without the slightest benefit, and who were almost instantly relieved by the operation under consideration. This fact has been witnessed again and again by my private pupils and by the public classes of the University of Louisville. And why should there be any hesitation or doubt concerning this operation? Where are its dangers, or the difficulties of its execution? I confess I cannot see any; and in making this remark let no one regard me as a visionary enthusiast. What I say is not speculation, but the result of personal observation; not prejudice, but actual experience at the bedside. It is only when the stricture is situated far back, in the membranous portion of the urethra, that the method is obnoxious to objection. Under such circumstances, especially when the obstruction is nearly impermeable, or where it is accompanied by a tortuous condition of the urethra, there may, I admit, not only be danger in attempting division, but the operation requires an amount of skill and anatomical knowledge which few men possess. But even here the well-directed efforts of the patient and persevering surgeon will generally be crowned with success. To the unskilful alone is the operation a stumbling-block; to the ignorant, foolishness."

"Scarification, as a remedy for the cure of stricture, acts in the same manner as incision, of which, as was before intimated, it is merely a modification. The process is best adapted to the milder varieties of firm, gristly contractions, seated in the spongy portion of the canal. I should certainly not resort to it either in the very simple or very aggravated forms of the malady; in the first it would be unnecessary, in the second, inadequate."

But we must bring our article to a conclusion. It is

long, but we believe our readers will not deem it too long, considering the interest of the subjects treated of, and the ability with which they have been discussed in the treatise before us. Dr. Gross has brought all his learning, experience, tact, and judgment to the task, and has produced a work worthy of his high reputation. We feel perfectly safe in recommending it to our readers as a monograph unequalled in interest and practical value by any other on the subject in our language; and we cannot help saying, that we esteem it a matter of just pride, that another work so creditable to our country has been contributed to our medical literature by a western physician. This treatise will take its place by the side of those of Professor Drake and Professor Miller, which have passed into the very first rank of American productions. It is a little more than two years since we had the pleasure of calling the attention of our readers to the original and judicious work of Prof. Miller on Parturition, which, as they are aware, has since been republished in London. The elaborate and profound work of Prof. Drake was announced about a year ago, and by the medical press at home and abroad, has been pronounced one of the ablest ever written by an American physician. We doubt whether more valuable accessions to our professional literature have been received in the same time from any quarter.

D. W. Y.

SELECTIONS

FROM

FOREIGN AND HOME MEDICAL JOURNALS.

A Case of Rupture of the Intestines, produced by a fall from a horse—resulting in Death. By P. D. McCulloch, M. D., of Murfreesborough, Tenn.—This case occurred with a negro boy belonging to Dr. Avent, aged 9 years.

He was thrown from a horse on Saturday, April the 27th, 1850, between 3 and 5 o'clock in the afternoon.

Dr. Avent being absent, I was called to see him at 2 o'clock, Sunday morning. I found him complaining of much pain over the whole abdomen, but when directed to put his hand on the part that gave him so much pain, he would invariably put it over the region of the Pyloric extremity of the stomach. He was in a state of partial collapse. He vomited up his dinner, which he had taken but a short time before the accident, and continued to retch for several hours after vomiting, but did not throw up any matter of any kind.

Under the free use of external stimuli, the circulation was sufficiently re-established to justify me in the use of the lancet. I took a small quantity of blood from his arm, but soon found that he would not bear its loss. I therefore checked the bleeding, and re-applied the sinapisms to the extremities and abdomen. I made a very minute examination of the whole body, but could detect no lesion of either the soft or bony parts.

I gave him at 5 o'clock in the morning seven grains of calomel, one grain of ipecac, the sixth of a grain of morphia, and directed that his bowels should be moved at 12 o'clock by castor oil, or an enema. At the time I left him,

his pulse was 100 to the minute and tolerably full, which was six o'clock in the morning.

Dr. Avent reached the patient at 8 o'clock, and shortly after he commenced sinking. Dr. Avent used different internal stimuli, together with sinapisms to the extremities, all of which proved abortive, as the patient continued to sink till 3 o'clock in the afternoon of Sunday, at which time he expired. His abdomen became very much swollen previous to death. Dr. Avent informed me that when pressure was made upon the abdomen it produced tetanic twitching of the muscles of the right shoulder and arm.

Autopsy 19 hours after death.

On laying open the abdominal cavity, a great quantity of very offensive gas escaped. There was also a large quantity of effused fluid. There were traces of intense inflammation of the whole peritoneum, but more especially that portion lining the walls of the cavity. Having a suspicion that there might be a rupture of the intestines, we commenced tracing them from the pylorus. We soon found the contents of the bowel, together with about half a dozen large intestinal worms, floating loose in the cavity of the abdomen. On tracing the bowel on, we found that the rupture had occurred in the jejunum, six feet from the pylorus, and in the opposite side to the main seat of pain, as complained of by the patient. There were two ruptures, about an inch apart, and in opposite sides of the bowel. Between the ruptures there were several dark gangrenous patches. There was no lesion in any of the other viscera. The place where the accident occurred was perfectly level.—*Proceedings Med. Soc. Ten.*

Case of Prolapsus Vesicæ. By G. D. Crosthwait, M. D., of Iowa City, Iowa.—Mrs. ———, aged 33 years, of nervo-sanguineous temperament, and delicate general health, and the mother of seven children, consulted me in regard to what she supposed to be prolapsus uteri, and from her description of symptoms, what I also supposed to be that affection. She had frequent pain in her back, pain on the front of her thighs, sense of dragging and bearing down, and in fact no symptom seemed to be wanting to constitute prolapsus uteri of a character so grave as on many

occasions to amount to procidentia. In order to determine the degree of the disease and the condition of the parts, I proposed an examination, which was assented to. I was somewhat surprised to find the uterus in its natural relation, or at least as nearly so as is usual in women of her diathesis and circumstances, and was compelled to suggest that she must be mistaken in reference to the procidentia, or at least its extent. She declared that it was so plain and palpable that there could be no mistake about it, but that it was easily returned, and often receded spontaneously. Under these circumstances, I could do no more than to request her, when the tumor again made its appearance, to let it remain until I could be notified and examine it. Within a few days I received the notification, and proceeded to the examination. I found a tumor as large as a hen's egg, or larger, proceeding from immediately behind the symphisis pubis, protruding considerably out of the vulva. There was no difficulty in determining that the protruding body was not the uterus, and on passing the finger beyond the tumor, that organ was found in its proper relation. The tumor was easily returned, though not without pain. This condition of things struck me with some surprise, but there was no difficuly in determining that the affection was a prolapsus, or hernia of the bladder. Its spontaneous reduction being owing generally, if not always, to the emptying of that viscus.

It, however, the diagnosis of the affection under examination at a suitable time became easy, it was far otherwise with regard to the remedy, if there be in fact a remedy which will cure it. I advised her to be prudent in diet and exercise, to avoid constipation, and to attend frequently and very promptly upon all calls to the discharge of urine. This course, indeed, renders the patient's situation very tolerably comfortable, but if the hernia takes place at any time when she is walking, or from home, under circumstances which prevent its manual reduction, she suffers very severe pain.

No pessary or other mechanical contrivance has been advised so far, for the reason that none, the construction of which I am familiar with, would seem to promise much, if any good. In fact, I have feared to recommend an ordinary pessary, lest its position being above the aperture through which the hernia makes its exit might, by its

downward pressure, tend to strangulate the hernia, or excite vesical inflammation.

I have not been able, in the limited access to books which my present residence affords, to find any case recorded which at all resembles the one under consideration. I therefore request the consideration of the subject by the society, with such suggestions on the treatment as the wisdom of its members may devise.

The history of the case shows that the affection has existed for several years.—*Ibid.*

Case of Puerperal Convulsions. By George Thompson, M. D., of Jefferson, Tenn.—On the 6th of April, 1850, Mrs. T., aged about twenty-five, and rather delicate, was taken in labor with her fourth child. Labor was natural and speedy. She was delivered at 10 o'clock, A. M., of a stout, healthy child. Placenta was expelled without difficulty, and with no unusual hemorrhage. The uterus contracted well. Complained of pain of her head, and her face was slightly flushed. She stated that she was very subject to head-ache when well, and she thought the present pain would be relieved as soon as she could get some sleep. I left her at 12 o'clock, as I then though doing well. I was summoned to her at about 3 o'clock P. M.; learned she had been attacked shortly after I left her with a violent convulsion, which had returned at intervals of less than an hour. She had then had three paroxysms. I found her partially comatose, restless, can be aroused, and answers rationally when questioned; complains of severe pain of her head, face flushed, pulse 170, hard and vibrating; tongue much swollen, from having been severely lacerated with the teeth during the convulsions.

I opened a large orifice in her arm, which bled freely. When she had lost about twenty ounces of blood, as violent a paroxysm of convulsions as I had ever witnessed, came on, which lasted about five minutes, leaving her entirely insensible. I continued the bleeding, until I had taken half a gallon. Her pulse now became very rapid, irregular, and could be but indistinctly felt at the wrist, hough strong in the temporal and carotid arteries; extremities cold. I now poured cold water very freely on

her head, applied sinapisms to her legs and hot bricks to her feet. Sensibility returned in half an hour. I then gave her thirty grains of calomel, and shortly afterwards one and a half grains of sulphate of morphine. At 9 o'clock, P. M., no convulsion since the bleeding; still complains of pain in her head; in other respects easy. I left her with instructions to pour cold water frequently on her head, and to keep the warm applications to her feet.

7th, 9 o'clock, A. M. Has had no return of convulsions; slept some in the night; complains still of pain of her head; pulse 120; calomel has not operated; ordered one ounce castor oil; continue cold water to the head.

5 o'clock, P. M. Pain of the head continues; pulse 120; skin hot on the head and chest; extremities cool; lochia in the usual quantity; calomel has not operated. Continue cold applications to the head; repeat the oil once every four hours, with enemata, until the bowels are freely operated on.

8th, 9 o'clock, A. M. Says she feels much better this morning; slept well last night; countenance looks cheerful; still complains of pain of her head, though not so severe; some febrile reaction; pulse 120; extremities warm. Bowels have been freely evacuated during the night, motions copious, and fœtid; ordered blister to the neck, a mixture of equal parts of wine of ipecac, spts. nitre, and paregoric, in teaspoonful doses, to be taken once every two hours; continue cold applications to her head.

I consider it unnecessary to give further details of this case. It progressed to complete recovery very rapidly; and Mrs. T. was able to attend to the usual duties of her family as early as after any previous labor.

This is the eleventh case of puerperal convulsions which I have treated since 1817, all of which have recovered speedily, without leaving the slightest unhealthy condition of the system. I am inclined to think this success unusual, and I attribute it entirely to the freedom and rapidity with which I abstract blood. My treatment in other respects does not differ from that usually adopted.

The first case of this alarming disease which I ever saw, was in 1818. I had been practicing medicine but a short time, and was a young man as well as a young doctor. The patient was an athletic young woman, in her first pregnancy. When I saw her she had been delivered,

during the paroxysms of convulsion, of a still born child, of about the usual size, and at the full period. She had suffered between thirty and forty of as violent paroxysms as I ever witnessed; was entirely insensible, with stertorous, laboring respiration; she could swallow nothing, and except when convulsed, lay with no evidence of life except breathing and pulse. Taken altogether, it seemed as hopeless a case as could be imagined. Bleeding and external applications were my only resource.

I had her taken out of bed and laid on an open jointed floor. I opened a large orifice in each arm, and cut both temporal arteries, and had blood flowing freely from all at the same time, determined to bleed her until the convulsions ceased, or as long as blood would flow. How much she bled I have no means of judging, for I designedly prevented any attempt to catch the blood, and the convulsions were so violent and so frequent, it could not have been caught if attempted. I suffered her to bleed until her pulse could not be felt at the wrist, and beat but feebly in the carotid arteries, by which time the convulsions ceased. Cold applications were made to the head, and blisters and sinapisms applied to the extremities. By the next day, sensibility had so far returned, that she could take medicine. The after treatment did not differ from that usually adopted in such cases. This woman recovered rapidly, without subsequent inconvenience.

This, my first case of puerperal convulsions, taught me to treat others. Since that time I have never bled my patient less than sixty ounces at a single bleeding, from as many and as large orifices as would insure the speedy accomplishment of my object. In many cases, I have little doubt I have taken double that quantity; for I have generally tried to prevent the quantity being known, for fear the friends of my patient should become alarmed and interpose to stop me before I wished.

My practice has been to bleed as long as I thought the bleeding itself would not endanger life. I have not had occasion to bleed the same patient a second time. I prefer to cut the temporal arteries in bad cases. In one case, when I failed to get blood as freely as I wished from other sources, I opened the external jugular vein. These eleven cases have occurred at various times since 1818; have been generally in young women in their first confinement.

In but one case has the delivery of the child arrested the convulsions, and in that case the child was delivered while blood was flowing.

In one case convulsions came on during the eighth month, without symptoms of labor; were arrested; came on again at the full period with labor; were arrested before delivery, which was afterwards effected by turning. The patient recovered in the usual time without a bad symptom.

I have stated that I thought the success of my treatment of this disease unusual. In verification of this statement I shall merely remark, that Dr. Lee, in his Clinical Midwifery, has reported forty-eight cases, (two of which I should not have called puerperal convulsions, but rather hysteria,) of which fourteen proved fatal at first, and two afterwards died of disease of the brain, the result of lesion left by the first attack.

I deem the present a suitable occasion to call the attention of the Society to a remedy in phlegmasia dolens, which I have not seen recommended in any treatise on that disease. I mean a simple roller bandage, firmly but evenly applied to the whole limb, from the toes to the pelvis. Those who have not applied this remedy to this disease, will be astonished at the speedy and entire relief of pain and inflammation produced by it. Try it, gentlemen, and your patients will bless you for the relief from pain of the most torturing character produced by it; and, instead of the mortification of having your cases under treatment for two or three months, you will find them cured in less than as many weeks.

I, of course, wish to be understood as recommending the bandage in this disease, in place of other external applications only, and not to the exclusion of such constitutional treatment as each case may require.

I prefer to keep the bandage wet with cold water or spirits.—*Ibid.*

Case of Stricture of the Bowels. By W. A. Smith, M. D., of Rutherford Co., Ten.—The history of the case about to be submitted is as follows:—J. W., aged 43 years, had chronic rheumatism for fifteen or twenty years previous

to his death, and it became so troublesome that he had to abandon his profession; had been addicted to the excessive use of alcoholic stimulants for fifteen or sixteen years; sometime previous to his last illness, he had been troubled with dyspeptic symptoms, for the relief of which he had visited the mineral wells in West Tennessee; during his stay in the District, had a slight diarrhœa, and health generally improved. A short time after his return to this county he was attacked in August last, with great pain in his bowels, with manifest fullness in the direction of the colon, and considerable borborygmus. Dr. Black was called in, to whom the patient stated, that for several months he had frequent attacks of colic, and that his bowels were very costive—rarely being moved, except from the use of purgatives.

This pain in the bowels came on in paroxysms, at intervals of fifteen or twenty minutes, and lasted about thirty seconds. During the paroxysms he suffered excruciating pain, and great sensibility of the walls of the abdomen—so much so that he could not bear the slightest pressure without increase of pain, and upon the subsidence of the paroxysm no pain was elicited by pressure. He stated that the above had been his condition for several days—and that he had gradually grown worse; that heretofore he had relieved himself with a pill composed of rhubarb and aloes; this remedy had now been tried, and failed to open his bowels. He had used a number of the domestic remedies for colic before the Doctor arrived, such as peppermint, camphor, and paregoric, but all to no effect. He now took a full dose of oleum ricini, with half an ounce of paregoric, and had flannel cloths wrung out of warm water applied to his abdomen—there being no arterial excitement indicating bloodletting.

After waiting some time, and no motion from his bowels, a stimulating enema was administered, which, according to the Doctor's statement, brought off a small discharge of indurated feces and some gas.

Partial freedom from pain was thus obtained, when the patient was left, with orders to take twenty grains of calomel, one grain of ipecac, and half a grain of sulphate morphia, to be taken in three hours, if his bowels were not moved again; to be followed (in case his bowels should not be moved within the usual time) with a full dose of

oleum ricini, and a teaspoonful of turpentine; fomentations continued, and enema to be repeated, if necessary.

Visited by Dr. Black on the next day; medicine had acted very imperfectly, and patient but little if any better. A turpentine enema was now given, which procured a free evacuation, followed by relief of the pain for a time at least. Prescribed a powder composed of five grains calomel, half grain ipecac, to be repeated every four hours until four in number had been taken, and if purging was not produced, to be followed by oil and turpentine, and the enema, as before, if necessary.

Visited the next day; remedies had all been used, and only moderate purging obtained, though the patient appeared to be much better, and thought he would be up soon. He was ordered to take some pills composed of blue mass, rhubarb, com. ext. of colocynth, so as to keep up the action of the bowels.

Nothing heard from him for four days, when Dr. Black was sent for again, and found the patient laboring under all the symptoms previously described—only with more violence. He was ordered to take croton oil (say two drops) in an ordinary dose of castor oil, with directions to repeat the dose at intervals of four hours, if necessary. The dose was repeated, and the pain growing worse, the attending physician was called in again.

At this visit the patient is represented to be suffering the most excruciating pain, coming on at intervals and lasting longer than they had previously done—the subsidence of the paroxysm was attended with a gurgling, like unto water escaping from a jug. His abdomen is now quite tympanitic, and very tender on pressure—more particularly when the paroxysm is on. This gurgling sound within the bowels was universally attended with a mitigation of all the urgent symptoms—it at all times appeared to take the direction of the colon—sometimes the sound began in the left, and at other times in the right side.

The sufferings of the patient were now greatly increased by the violent efforts to expel the contents of the bowels, which was prevented by some obstruction as was supposed—either spasm, intussusception, stricture, or indurated feces.

With this view of the case, purgatives were discontinued, and free leeching and fomentations were used,

with as much of the acetate morphia as might be necessary to quiet the action of the bowels and secure an exemption from pain.

About this time, Dr. Jas. E. Wendel and Dr. Avent saw the case, and it was agreed that a flexible bougie, twenty-two inches in length, should be passed up the rectum in search of some obstruction. The withdrawal of the instrument was followed by an evacuation of feculent matter, which brought but little relief to the patient. Leeching, fomentations, blisters, alternate doses of calomel, and the internal use of anodynes, constituted the treatment for several days, with little or no variation in the symptoms.

About the 4th or 5th of September, five of the faculty called to see the case, and just before their arrival the patient had a copious fluid evacuation, passing tomatoe seed, which had been eaten a week previously. All the symptoms appeared to be greatly relieved for several days. The warm bath, alternate doses of mercury, combined with hyosciamus, stramonium, cicuta, morphia and ipecac, and solutions of the iodide of potash, constituted the treatment for several weeks, with but little variation in the symptoms. From the first of September, the patient was kept almost continually under the influence of narcotics, and whenever these were stopped, his pain would return with great severity. For three months previous to his death, he rarely had a motion from his bowels only when under the influence of opiates. During his entire sickness, his constitution was never reached by the mercurials, though they had been employed freely, both externally and internally.

About the 1st of November, Dr. B. took a trip to the South, but before leaving requested me to see his patient occasionally. I did so. At this time the patient was recovering from an unusually free attack of watery purging. He continued to take the morphia, and, in fact, there appeared to be no freedom from pain only when under its influence. As almost every thing had been tried, I determined to put him on quinine and the precipitated carb. iron, with the view of meeting the paroxysmal indications. This was kept up for two or three weeks, but brought no relief. The quinine and iron were then withheld, and the tinct. of poke root tried to no effect. About the 25th of November, he complained of some fullness in his bowels,

which was soon followed by swelling of the feet. At the suggestion of Dr. Rucker, the tinc. of the pokeberry was given in place of that made from the root, but no benefit was derived from the change, the patiently gradually sinking at the time.

On Christmas morning, I called to see him; found Dr. Black there; learned that the patient had sat up that morning, and expressed himself better than usual, and all at once, without any assignable cause, went into a profound coma, out of which he was never aroused. When he was in articulo mortis, his pulse was remarkably good, say numbering about 90 and regular, with volume enough to indicate that blood was thrown to the extremities. On the next day, which was the 26th of September, Dr. B. and myself made a post mortem examination; found about three pints of serum in the peritoneal cavity; the whole serious membrane lining the cavity of the abdomen, thickly studied with miliary tubercle; several points of illium highly inflamed, and of recent origin; the entire colon was very much thickened and indurated, and enlarged, except two strictured points; cecum also inflamed; one of the contracted points of the colon was just above where it unites with the rectum, and the other near caput coli. The contractions were about two inches in length, and from one-quarter to one-half inch in diameter, and when cut into, presented the appearance of a fibro-cartilaginous substance. The stomach was very much contracted, with its wall thickened to a considerable degree, in fact, the whole alimentary canal was literally a mass of disease.

In connection with this report, imperfect as it must necessarily be, permit me to submit to the inspection of the Society some nondescripts, (if I may use the expression,) obtained from a section of the colon.—*Ibid.*

Case of Progressive and Morbid Diminution of the whole Body. By Dr. J. B. Armstrong, of Cannon Co., Tenn.—June 27th, 1848, I was called to visit Mrs. F., whose case was described by the messenger as being of a consumptive character. When I arrived at her house, I found many of her friends present, anxious to hear the result of my examination. They had been in great doubts whether she was not laboring under consumption. I was informed

that she was between the seventh and eighth months of pregnancy. Her friends had been led to fear consumption from the extreme emaciation of her whole system. The general atrophy, or morbid diminution, had gone as far as we frequently find in the last stages of phthisis pulmonalis, and tabes mesenterica. This had occurred in a very gradual manner, from the earliest stage of pregnancy. Her temperament was predominantly nervous. Her tongue was slightly red, and the papillæ somewhat elevated. Pulse 70, and of moderate volume; skin dry and husky; constant thirst for all kinds of drink, and her countenance looked natural and lively. She stated she had not been very sick, and at present was not suffering from any particular pain; but that she had grown so very lean, as to be unable to attend to business of any kind. She was weak when called into exercise, and at the same time it was without any great sense of feebleness.

All the unnatural conditions of the system, as related by her, were dizziness, slight headache, and extreme costiveness, with an ungovernable appetite for all kinds of food, and especially meats. She had indulged her appetite freely, and her digestion appeared good.

I found no unhealthy indications from my examinations over the regions of the thorax and abdomen—except slight tenderness in the epigastric region. Pregnancy rendered my explorations imperfect, as regards the bowels, &c. It was common when in health for her bowels to be evacuated not more than once in seven days, but now it had passed as many as fifteen and eighteen days.

In this case, I found such extreme aberration of the nutritive function, as to excite in my mind the deepest interest. She was a moderate size lady when well, but now would not have weighed more than sixty-five pounds.

The farther my examination was carried, the greater was my astonishment, to find such extreme thinness of the muscular system. I could grasp with perfect freedom many of the organs contained in the abdomen, which were not too near, or behind the womb. Whilst thus seated, and continuing a manual examination, my attention was directed to the womb through the walls of the abdomen. I found it to be equally involved in the emaciation. At this moment the fetus moved, and pressed one foot against the parietes of the uterus, in such a manner as to present to the eye the full shape of the foot through the integu-

ments of the abdomen. Mrs. F. caught hold of its foot, and said in the same way she could often feel of its hand, and distinguish its thumb from its fingers. I did not make the attempt, yet, I think it very probable that I could have carried my examinations so far as to have distinguished the sex of the fetus, and, too, without injury to it, or much pain to the lady.

Probably owing to pregnancy, the abdominal muscles and integuments had not contracted, as we would suppose ordinarily with such general emaciation.

I found so little derangement fixed upon the most important indexes of the system, that it was with great difficulty I could prescribe, with any certainty for her relief. It was already too evident should she continue to go down hill further before the proper period of parturition, she would not be able to bear up under the labor of giving birth to her child.

Consequently, I prescribed for her—1st. Directed a pill of equal parts of colocynth, rhubarb and aloes, purposely to produce more frequent evacuations from the bowels. Next in view, I wished to prescribe a tonic to sustain and prevent further emaciation. In one respect I thought she needed a tonic, and in others it appeared counter-indicated—for this reason, I merely prescribed the compound tincture of gentian, in doses of two fluid drachms three times daily. The cathartic was so regulated as to produce a regular evacuation every forty-eight hours.

On the 30th I visited her again, and found slight improvement, and treatment continued.

On the 10th of July I called in to see her again, and found her, as she supposed, a little stronger. Treatment was continued as before. In this way she continued up to the birth of her child—it occurring in the most natural order. The child supposed to weigh between three and a half and four pounds.

After the first month from the birth of her child, recovered—gaining strength and flesh rapidly, and at the end of four months, she looked to be in common health.

Her husband informs me that she has had but one catamenial discharge since the birth of her child, and he has reason to fear she is now approaching the same form of disease. Should such be the case, what would be the best and most successful mode of treatment?—*Ibid.*

Urea, its Tests and Origin. By Prof. Lehmann.—Urea may generally be very easily recognised by its properties, especially by its behavior towards nitric and oxalic acids; but when we have to discover very minute quantities of this substance in albuminous fluids, it is often very difficult to determine its presence with scientific precision. It is in alcoholic extracts that we must always seek for urea; but before we proceed to search for it, there are several precautionary measures to be adopted, the neglect of which would render our attempt to discover it futile. In the first place, in reference to the presence of albuminous substances, if we wish to discover small quantities of urea in albuminous fluids, we must not be satisfied with the removal of the albumen by simple boiling; since, by the coagulation of the albumen, the fluid becomes more alkaline, and might, during evaporation, induce a decomposition of the urea; moreover, all albuminous matter is not precipitated by boiling, but a portion remains dissolved by the alkali, and is taken up in the alcoholic extract. On evaporation, this albumen undergoes a change, which probably coöperates with the alkali in inducing the decomposition of the urea. This may explain how it was that Marchand could only recover 0.2 of a gramme of urea from a mixture of 200 grammes of serum and 1 gramme of urea. Hence, before boiling the albuminous fluid, we must add a few drops of acetic acid, so as to give it a slightly acid reaction, whereby not only is the alkalescence of the fluid prevented, but a much more perfect separation of the coagulable matters is effected. If the residue of the fluid from which the coagulated matters have been filtered be extracted with cold alcohol, and the solution rapidly evaporated, so as to cause the chloride of sodium (taken up by the cold alcohol) to separate as much as possible in crystals, on then bringing a drop of the mother-liquid in contact with nitric acid under the microscope, we shall observe the commencement of the formation of the rhombic octohedra, and the hexagonal tablets, in which, if the investigation is to be unquestionable, the acute angles (=82°) must be always measured. After determination of the nitrate, we may also obtain the oxalate, and submit it to microscopic examination. A good crystallometric determination yields, however, the same certainty as an elementary analysis, which, in these

cases, would never or extremely seldom be possible.

The investigations of Marchand have thrown much light upon this subject [the seat of the actual formation of urea]. This accurate observer could only recover 0.2 of a gramme of urea from 200 grammes of serum, to which 1 gramme of urea had been added. He shows that, even if the urea were only separated from the blood at the end of each successive hour, it could not have accumulated in such quantity as to have been discoverable by the present mode of investigation. The following consideration will give us an idea of the small quantity of urea which, according to Marchand's hypothesis, at the most can accumulate in the blood in one hour:—From the experiments of Ed. Weber, which I have in part confirmed, we may assume that there are, in an adult man, at most 6 or 7 kilogrammes [16 to 19 pounds] of circulating blood. Now, if, in twenty-four hours, 30 grammes of urea are discharged, at most only 1.25 grammes could accumulate in one hour in the whole mass of the blood; so that only 0.021 could be contained in it. This minute quantity can, however, as we have already shown, only be detected in operating on very large masses of blood and by the aid of the microscope. Hence it is easy to understand why, during my experiments with an animal diet, while the urine was loaded with urea, none of this substance could be discovered in the blood.

If it be now established that the urea is not primarily formed in the kidneys, the question still remains to be answered, whether it is produced in the circulating blood or in the individual living organs, (as, for instance, the muscles,) and from what materials it is principally formed. In the present state of our knowledge, we may answer, that the urea is formed in the blood, and that it is produced from materials that have become effete, the detritus of tissues, as well as from unserviceable and superfluous nitrogenous substances in the blood. No animal tissue presents such vital activity, is so much used, and is so rapidly worn out, as muscular tissue; it is in this tissue that the metamorphosis of matter proceeds most rapidly and abundantly; and yet, in the large quantities of muscular fluid on which Liebig worked, he could detect no trace of urea, although he found substances from which he could produce urea artificially. We must therefore assume

that these substances, as creatine and probably inosinic acid, are decomposed in the blood, by the action of the alkalies and of free oxygen, into urea and other matters to be excreted. Moreover, my experiments, showing that the superfluous nitrogenous food which enters the blood, and the fact that caffeine, glycine (Horsford), uric acid, and alloxantin (Wohler and Frerichs), soon after they have been taken, perceptibly increase the amount of urea in the urine, support the view that urea is formed in the blood. It is impossible to suppose that this nitrogenous food is first converted into tissue, and subsequently into urea, &c.; for we cannot think that a process occurs here, analogous to that exhibited by the percussion-apparatus of the physicists, where a certain number of parts effecting a percussion give rise to the repulsion of an equal number of parts. Hence the conversion of this matter can occur in no other place than in the circulating blood, and therefore it is here that the urea must be formed.

That the urea is formed from nitrogenous matters could not be doubted, even if it did not contain nitrogen (and that in so large a quantity); for it is especially after the use of highly nitrogenous food, that we find an augmentation of its quantity in the urine. If, however, we should further inquire,—from what substances is it produced, and what tissues principally contribute to its formation?—we could not, in the present state of our knowledge, give any satisfactory answer to this question. All that we know is, that urea is a very general product of the decomposition of nitrogenous matters, both naturally within the animal body, and artificially in the laboratory of the chemist. We have already said enough to show, that urea is so common a product of the decomposition of nitrogenous bodies, that we could hardly any longer enumerate it among true organic substances, if we tried to establish a distinction between organic and inorganic matter. Moreover, when we treat of uric acid, we shall show, that, in all probability, a great part of the urea separated by the kidneys from the blood is the product of the decomposition of that acid.—*Med. Chir. Rev.*

On the Temperature of Man within the Tropics. By Dr. John Davy.—In continuation of some former researches on the Temperature of Man [Phil. Trans., 1845], Dr. Davy has communicated to the Royal Society the results of his subsequent observations on this subject, during a period of three years and a half, chiefly at Barbadoes, where the mean annual temperature of the atmosphere, he states, is 80° Fahr., and the range of temperature throughout the year from about 10° to 18° in the open air. The observations were made three times a day; the temperature of the body being noted, with that of the external air, the pulse, and the number of respirations per minute; all of which are duly set forth in elaborate tables. The chief general results are the following: 1. That the average temperature of man, within the tropics, is a little higher, nearly 1°, than in a temperate climate, such as that of England. 2. That within the tropics as in cooler regions, the temperature of the body is almost constantly fluctuating. 3. That the order of fluctuating is different from that in a cooler climate; the minimum degree being early in the morning, after a night's rest,—and not at night. 4. That all exertion, whether of body or mind, except itbe very gentle, has a heightening effect on the temperature; while passive exercise, especially carriage exercise, has a lowering tendency. 5. That heavy clothing, especially if tight and close, tends to raise the temperature unduly, especially under active exercise; and that close, ill-ventilated rooms, especially when crowded, have, in a marked manner, the same tendency. 6. That when the body is in a healthy state, it rapidly recovers its normal condition as to temperature. 7. That when laboring under disease, however slight, the temperature is abnormally elevated, its undue degree being some criterion of the intensity of the diseased action. 8. That within the tropics, there is comparatively little difference of temperature between the surface of the body and the internal parts; the skin is more active in its functions, and the kidneys are less active; the former state being connected, perhaps with a rapid desquamation of cuticle; the latter, with an absence of lithic acid. 9. That the effect of wine, unless used in great moderation, is commonly lowering as to temperature, whilst it accelerates the heart's action; followed, after awhile, by an in-

crease of temperature. 10. The tendency of sea-sickness, like that of disease, is to elevate the temperature. 11. The tendency of a sea-voyage, apart from sea-sickness, is to equalize the temperature without permanently elevating it. 12. That even at sea, with a change of atmospheric temperature, there is a tendency to change of temperature of the body, increasing towards the tropics. The most interesting facts, however, are the changes of temperature depending on changes of health or disease, and the lowering influence of wines and ordinary stimulants.—*Philosophical Transactions*, 1850.—*Ibid.*

The Diagnosis of Fevers.—If we had been asked some twenty years ago, to find an appropriate simile for the disease called Fever, we could have made no better comparison than with our serviceable friend Proteus. Fever, we should have said, is something of everything, nothing of its own: you never find it in the same costume. It transforms itself like a Harlequin, and when you think you have at last got it into a corner, it disappears into the depths below, and rises at the other end of the stage, in the likeness of Pantaloon. In Paris, in London, and in Edinburgh, it presents itself with a different physiognomy, or else, "like Cerberus, it is three gentlemen at once." Attempt to draw its portrait, and you make as great a medley as Blumenbach would have done, had he compounded an ideal skull out of his immense collection. It is as difficult as Etruscan, and is to be deciphered by guess-work, like the arrow-headed writing. It is like the sphynx, for it devours its interrogators, and gives them no clue to its riddle. And it is even worse than the sphynx, for that did yield to an Œdipus; whilst the solution of *this* enigma is yet to be found.

In some such despairing strain we should, twenty years ago, have spoken of a disease, which was said to be located in every organ of the body, and yet could be found no where; which presented all symptoms, yet apparently none twice over; which was cured in all ways, but seldom in the same way by any two persons; and which was designated by all sorts of names, the recommendation of each of which was, that it was as applicable as any other.

This uncertainty and discrepancy of observation does not, however, now prevail to anything like the extent it formerly did. The difficulties in the study of fevers have yielded, or appear to be yielding, before the close and incessant observation with which they have been regarded. The inquiries even of twenty years since, appear coarse and narrow by the side of our greater knowledge; and we look forward to the speedy coming of the time, when even our observations will seem superficial and ill-directed to the clearer light of advanced intelligence.—*Medico-Chirurgical Review.*

Two Remarkable Cases of Abstinence. By Dr. Taylor. —The *first* of these cases occurred in a man, æt. 50, who, after commercial disasters, began to manifest some symptoms of insanity, one of which was obstin te refusal of food. For *ten* days and nights he entirely abstained from food or drink, but then by stratagem was induced to take a hearty meal. This was followed by another period of abstinence for fourteen days and nights, during which period he passed stools once and urine three times. He slept well, walked about the room occasionally, and suffered neither from fever nor exhaustion; on the 15th day he took a little water, and in future took a little of this as well as a little milk—not above a gill per diem, sometimes refusing it for days together. This state of things continued until his death, he having lived in a state of almost complete abstinence for about 100 days, a demulcent injection having been administered on rare occasions. Independently of the emaciation, he presented no symptom of disease. He passed urine every ten days, and a slight stool every fifteen days.

Mr. ——, the subject of the second case, æt. 26, after manifesting other symptoms of mental derangement, lived during one year, eighteen weeks, and sixteen days in an almost complete state of starvation, taking nothing during the last fifty-one days but a little water occasionally. He had no fæcal evacuations for seventy-two days prior to death, but passed small quantities of urine every three or four days.—*Amer. Jour. Med. Sc.*

Influence of the Poison of the Northern Rattle-Snake (Crotalus Durissus) on Plants. By J. H. Salisbury, M. D., Chemist to New York State Agricultural Society.—On the 18th of June, 1851, a large female rattlesnake —which had been caged in the New York State Cabinet of Natural History, died. On dissection, its stomach and intestinal canal were found entirely empty, as much so as if they had been scoured out with soap suds. The sack in which the poison is emptied was laid open, and the virulent matter, (of which there was but little,) carefully removed and placed in a porcelain capsule. About five minutes after its removal, four young shoots of the lilac, (syringa vulgaris); a small horse chestnut, (æsculus hippocastanum), of one year's growth; a corn plant, (zea maix); a sunflower plant, (helianthus americus); and a wild cucumber vine, were vaccinated with it. The vaccination was performed by the dipping the point of a penknife into the virulent matter, and then inserting it into the plant, just beneath the inner bark. No visible effect, in either case, of the influence of the poison was perceptible, till about sixty hours after it had been inserted. Soon after this, the leaves above the wound, in each case, began to wilt. The bark in the vicinity of the incision exhibited scarcely a perceptible change; in fact, it would have been difficult to have found the points, if they had not been marked, where the poison was inserted.

Ninety-six hours after the operation, nearly all the leaf-blades, in each of the plants, above the wounded part, were wilted and quite dead. On the fifth day, the petioles and bark, above the incisions, began to lose their freshness, and on the sixth day they were considerably withered. On the seventh day they were about as they were on the sixth. On the tenth day they began to show slight signs of recovery. On the fifteenth day, new, but sickly appearing leaves began to show themselves on the lilacs, and the other plants began to present slight signs of recovery in the same way. Neither of the plants were entirely destroyed. It was interesting to mark the progressive influence of the poison. The first indication of the derangement of the healthy functions of the plants was observed in the leaves. These began to wilt and die at their edges and apices, and this death gradually and uniformly advanced on all sides towards the mid-rib and

petiole, till the whole or nearly the entire leaf was destroyed.

It is an interesting fact in physiology that the plants first exhibited signs of death in the leaves situated on the side in which the incisions were made. This shows a less perfect system of anastomosing vessels than in the animal.

The facts naturally deducible from these experiments, are:—

That the effects of the poison of the rattlesnake upon plants and animals, when introduced into their circulation by a wound, are similar. It is stated on good authority that the poison of the snake can be taken into the stomach of the animal with impunity—its dangerous effects being only exhibited when introduced into the circulation, by a wound. It would be interesting to note its influence on the animal when applied externally to the skin, to see whether its deadly effects would be modified by the absorbents.

That it requires a much longer time for it to affect the plant than the animal. It should be stated, in order to show that animals were readily affected by the poison of the snake, that a short time previous to its death, a rat, bitten by it, died in about two hours.

That the effects were invariably exhibited on the part above the wound, and in no case affected the leaves below it. This was probably owing to the small quantity of the poison introduced in each instance.

That it invariably affected first the leaves on the side of the plant in which the incision was made.

That its influence was invariably first rendered visible on the edges and apices of the leaf blades. In this respect the effects of this poison on plants resembles strikingly, in its beginning and progress, the disease which has for the last few years affected so much the potato.—*Proceedings Am. Sci. Asso.*

We have been favored in the way described by our confrêre of the *Northern Lancet:*

Demonstrative Midwifery.—We have been favored with no less than *four* copies of the *Buffalo Courier*, of the 24th of June, and our attention forcibly attracted by imposing black lines encircling an article headed "Demon-

strative Midwifery, again and for the last time." We have also received a copy of a Christian paper, published in the same city, and the name of which we did not deem it worth while to remember, reproducing the same article, and, therefore, plainly indicating that the same cowardly "NANCY" is the writer of both, and conceals herself under the obscurity of the editorial garb, to detract from Prof. White's motives, and to plume herself with the verdict of the American Medical Association.

In our number for November, 1850, we very plainly expressed our views in relation to Demonstrative Midwifery, we heartily commended the Professor's course, and in as free language expressed our contempt for the "XVII." We re-assert the same sentiments, and say to the Editor of the Courier and to his clerical brother, that our opinion is in nowise altered by the action of the Association on the subject. The Association, like every other body of men, whether legislative, scientific, or political, while they enact sound laws, give satisfactory deductions, or work for the "greatest good of the greatest number," are, nevertheless as truly guilty of many foolish and absurd things. The veto of the Association does not weigh one particle with us, and we know of very many others who will not in the least be affected by it.

We sincerely trust for the advancement of science, and the benefit of humanity, that this only true mode of imparting sound knowledge, of a most difficult and responsible department of our profession, will not be stayed by the clamors of ignorant, prejudiced, and cowardly men, in and out of the profession, but that Prof. White and his associates in the University of Buffalo will persevere in the course they have adopted, and which must reflect to their honor, and to the credit of their School.—*Northern Lancet.*

On the Use of Collodion in Ingrowing Nail. By M. Meynier, M. D.—M. Meynier treats this affection by pressing down the fleshy portion, and pouring in between this and the edge of the nail a small quantity of collodion, which soon solidifies, induces rapid cicatrisation of the ulceration, and, when the disease does not arise from an abnormal shape of the nail, procures a cure. M. H. Larrey has recently tried the plan in five cases, and succeeded in four of these.—*Bull. de Therap.*

Quinine in Cholera Infantum. By G. W. Booth, M. D., of Hardin county, Tenn.—I have for sometime intended to call the attention of my professional brethren to the quinine mode of treating Cholera Infantum. I have practised in Mississippi and Tennessee for several years—regions where that disease annually makes its visitations. I have had an opportunity of seeing much of it, and treating a great number of cases. I believe its remote cause to be identical with that of our common autumnal fevers.

It prevails at the same period of the year, and in the same locations, and I have found it amenable to the same treatment, aided by the usual remedies for the local complications. There are in all the cases that have fallen under my notice distinct remissions, if not intermissions. During this subsidence of the symptoms, I give quinine liberally, and, in fact, in many cases I give it, regardless of fever, throughout the disease. I can confidently recommend this mode of treatment as preeminently successful, after testing it for many years. I have seen many cases recover under the use of the sulphate, that I should have despaired of without its aid. I write this simply to get you to call the attention of the profession to the use of quinine in this disease. I have never written an article for the medical press; and this is not intended for the public eye.* I do not expect that any, or at least many, will adopt any mode of treatment differing from what is usual, on the recommendation of an obscure practitioner—one entirely unknown to fame. As this is the season for the prevalence of Cholera Infantum in your city, I request you to give it a full and fair trial; and if you find it successful, then send it abroad under the prestige of your Gazette. I use the quinine in every stage of the disease, in what would by many be considered large doses. Occasionally I defer its use for a short time, to relieve some of the most urgent symptoms—such as excessive gastric irritability, and cerebral affections.—*New York Med. Gaz.*

[*We insert it, nevertheless, in the hope that Dr. B. and others of what are called country practitioners will be encouraged to write for the medical press.—Ed.]

A Case of Small-Pox recurring a third time after Vaccination, when it proved fatal.—Dr. John Webster communicated an example of this to the Royal Medical and Chirurgical Society, Feb. 26, 1851. After alluding to the fact that hooping-cough, measles, and scarlatina generally occur only once during the lifetime of an individual, exceptions, nevertheless, to the above rule, as well in these complaints as in small-pox, have been recorded byauthors. Three well-marked examples of the recurrence of small-pox met with in the same family are related, one of whic terminated fatally. The case especially referred to by Dr. Webster was that of H. N. N——, who had been vaccinated satisfactorily in 1827, when three months old. Notwithstanding this circumstance, he became attacked by small-pox in 1833, along with an elder brother, who had been likewise vaccinated. Both patients recovered, and nothing more was thought of the matter till 1838, when the two lads were again attacked by variola, along with another—that is a third—brother, likewise regularly vaccinated. However, all three got quite well in due time. Subsequently, Mr. H. N. N——, whose case is now just mentioned, went to India in the Company's service, where he was seized, in April last, with the usual and well-marked symptoms of small-pox, which soon became confluent, and proved fatal at Dharwarinth, on the 13th of that month: this making the third time this gentleman had been attacked by variola, although previously vaccinated.—*American Journ. Med. Sci.*

Creosote in Diarrhea.—M. Kesteven extols the efficacy of creosote in the cure of diarrhea. The form in which he used it was: ℞.—Creosoti m. j to m. v; Spt. ammon. arom. m. xv to ℥j; Aq. ℥j to ℥iss. Where pain has been severe, Tinc. camph. co. had been added.

In no single case, Mr. K. says, has creosote failed to be of signal benefit; in most cases one single dose was sufficient to arrest the course of the disease; in very few instances has it been requisite to administer more than the second dose.—*Amer. Jour. Med. Science.*

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LOUISVILLE, OCTOBER 1, 1851.

UNIVERSITY OF LOUISVILLE.

Professor Silliman, who returned from Europe in the steam ship Pacific, on the 15th of September, made some valuable purchases for the University of Louisville while abroad, consisting of books, chemical apparatus, and models illustrative of healthy and morbid anatomy. The articles are expected to arrive in time for the approaching course of lectures. Prof. S. mentions that the University of Pennsylvania, and the schools of New Orleans, St. Louis, Columbus, and Nashville had made purchases of similar models, which are prepared by Madame Thibert, widow of the late Dr. Thibert, an American lady. They are said to be of exquisite workmanship, rendering and preserving the minutest anatomical details. "Besides the excellence of these models for instruction," says Dr. S.—"all copied from nature and vastly superior in effect and usefulness to the nauseous and ill-conditioned wet specimens which usually disgrace museums, they form a collection which it costs nothing to keep." The series of models from which Dr. S. made his selections embraces all the pathological specimens in the museum of Dupuytren. The addition of these fine models to our schools will very much enhance the pleasure and interest both of medical teaching and study.

UNIVERSITY OF PENNSYLVANIA.

In the report of the Faculty of the University of Pennsylvania for the past session, perfect satisfaction is expressed with the success of the experiment of a lengthened term. "Certainly," they say, "if a measure can be judged by its fruits, this must, so far as experience has yet determined, be considered as highly efficacious."

We are gratified to see this declaration. We have from the first felt favorably disposed to the extension of the lecture-term, and since the innovation has proved successful in the parent school of the country, we hope to see it gradually introduced into the others. Y.

PRIZE ESSAYS.

We take pleasure in republishing the following circular:—

"*American Medical Asssociation. Prize Essays.*—At a meeting of the American Medical Association, held in Charleston, S. C., in May last, the undersigned were appointed a committee to receive and examine such voluntary communications on subjects connected with medical science as individuals might see fit to make, and to award a prize to any number of them not exceeding five, if they should be regarded as entitled to such a distinction.

"To carry into effect the intentions of the association, notice is hereby given that all such communications must be sent, post-paid, on or before the first day of April, 1852, to Geo. Hayward, M. D., Boston, Mass. Each communication must be accompanied by a packet containing the name of the author, which will not be opened unless the accompanying communication be deemed worthy of a prize. The authors of the unsuccessful papers may receive them on application to the committee, at any time after the first of June, 1852; and the successful ones, it is understood, will be printed in the Transactions of the Association."

GEORGE HAYWARD, *Boston.*
J. B. S. JACKSON, "
D. H. STORER, "
JACOB BIGELOW, "
USHER PARSONS, *Providence, R. I.*

Boston, Aug. 20, 1851.

QUININE IN CHOLERA INFANTUM.

We give among our selections, the experience of a physician of Tennessee in the use of sulphate of quinine in cholera infantum. Some years ago, we called the attention of our professional brethren to the

same practice, observation having convinced us that this complaint of children was, in many cases, a form of intermittent fever. It will often be found on watching the progress of the case that it is paroxysmal, and when this feature manifests itself quinine is clearly indicated and is entirely efficacious. It is an interesting fact that cholera infantum appears to be on the decline in all parts of our country. Twenty-five years ago one of the most troublesome and fatal diseases among children, it is now but little dreaded. Whether this subsidence is but temporary, and after a time the complaint is to return with its former severity, is a question to which it would be difficult to give a satisfactory answer.

Y.

HAIR BLANCHED BY SUDDEN FEAR.

Our readers have all read of instances of this sort. We copy the following interesting case from the *Boston Medical and Surgical Journal*, or which it was reported by Dr. E. R. Smilie:

"A young man 23 years old came from the mines to San Francisco, with the intention of soon leaving the latter place for home. On the evening of his arrival, he, with his companions, visited the gambling saloons. After watching for a long time the varied fortunes of a table, supposed to be undergoing the process of "tapping," from the continued success of those betting against the bank, the excitement overthrew his better judgment, and he threw upon the "seven spot" of a new deal, a bag which he said contained 1100 dollars—*his all*, the result of two years' privation and hard labor—exclaiming, with a voice trembling from intense excitement, "*my home or the mines.*" As the dealer slowly resumed the drawing of his cards—with his countenance livid, from fear of the inevitable fate that seems ever attendant upon the tapping process when once commenced—I turned my eyes towards the young man who had staked his whole gains upon a card; and never shall I forget the impression made by his look of intense anxiety, as he watched the cards as they fell from the dealer's hands. All the energies of his system seemed concentrated in the fixed gaze of his eyes, while the deadly pallor of his face bespoke the subdued action of his heart. All around seemed infected with the sympathetic powers of the spell—even the hitherto successful winners forgot their own stakes, in the hazardous chance placed upon the issue of the bet. The cards are slowly told, with the precision of high-wrought excitement. The seven spot wins! The spell is broken—re-action takes place. The winner exclaims, with a deep-drawn sigh, "*I will never gamble again*," and was carried from the room in a deep swoon, from which he did not fully recover until the next morning, and then to know that the equivalent surrendered for his gain, was the color of his hair, now changed to a perfect white."

HEALTH OF LOUISVILLE.

Since we wrote our last paragraph on this subject we have uot heard of a case of cholera in the city, nor has a case been reported by the Board of Health. In the time, we have experienced some intensely hot weather, the thermometer in the shade having risen several days as high as 93°. No rain has fallen in six weeks. Dysentery, which has been so fatal in many parts of the country, has rather declined in the city during the last month, and with the exception of intermittent fever, very little sickness prevails.

DR. J. V. C. SMITH, OF BOSTON.

We cordially welcome the return of this confrêre, the veteran editor of the Boston Medical and Surgical Journal, who has just completed an extensive tour through Europe, Asia, and Africa, and is entering again upon his arduous labors. After much intercourse with medical men in the old world he thus speaks of his professional brethren at home:—

"Diseases are nowhere controlled with more skill than in the United States, nor is there a country on the globe where the benefits accruing to society from the efforts of indefatigable practitioners of medicine and surgery, are more apparent. If further advances have been made in Europe, they have resulted from a sub-division of labor. Those most distinguished for their accuracy in detecting the causes of disease, and in the administration of remedies, have attained their tact and distinction by pursuing a specialty"

PRELIMINARY LECTURES.

With the issue of our present number, the October course of Lectures opens in the University of Louisville. The Professors by thi preliminary course consider that they are virtually extending the term by one month, and thus assent to the wisdom of the innovation recommended by the American Medical Association. Besides the professors, Dr. Richardson, demonstrator of Anatomy, Dr. D. W. Yandell, Dr. R. J. Breckinridge, Jr., Dr. William H. Cobb, and Dr. William Miller will participate in this course, which embraces clinical lectures and instruction in practical anatomy. We think we are safe in promising students an instructive course of lectures.

THE AMERICAN MEDICAL ASSOCIATION—DRS. RAMSEY AND ROBERTSON.

We have received from Dr. Ramsey, of Raysville, Ga., a copy of his appeal to the medical profession, and it is due to professional courtesy and justice, that some notice shall be taken of the controversy in which Dr. Ramsey is involved, with certain members of the medical profession.

Those who have read the report of the proceedings of the American Medical Association, of last May, will remember that while Dr. Storer, chairman of the committee on Obstetrics, was reading his report, he was arrested in the reading by a declaration on the part of Dr. F. M. Robertson, that certain statistics taken from a paper, published by Dr. Ramsey, in the Medical Examiner, of last October, were false, and that the author was not a reliable man. The report was recommitted, and on the following day of the session, Dr. Storer announced that he had erased the statistics in question, and placed the report in the hands of the Association.

In the July number of the Medical Examiner, the courteous and able editors of that journal, made the following just and proper remarks:

"We confess that these proceedings struck us as somewhat extraordinary. We have no personal knowledge of either of the gentlemen named, and we write in the dark as to the under-current of feeling which may have prevailed on the occasion. But, forming our judgment from the record, we cannot but dissent from the decision which was made. Whatever the merits of the case, the ordinary forms of justice were disregarded in the condemnation of an unheard, absent person; and there appears to us to have been in every way a want of propriety in the time, the place, and the tribunal, which were selected for the trial of this question of credibility. The affair seems to have been very much a 'snap judgment.'"

These sentiments seem to us to be eminently correct, and if their spirit prevailed more generally among medical men, the profession and the community would be gainers. While we would severely condemn those who endeavor to manufacture a reputation by false reports, we hold that he who charges a professional brother with heinous offences, should be well fortified with testimony before he undertakes to publish his charges. A man who deliberately libels another, who assails him for conduct of which he was not guilty, and who undertakes by falsehood to undermine the professional reputation of a brother physician, when the truths of the case would have been creditable, is an unfit associate for members of the medical profession, and his proper retribution would be degradation from his position among medical men.

We gather from Dr. Ramsey's pamphlet, that Dr. Robertson felt himself justified in arresting the statistics of Dr. Ramsey before the American Medical Association, for the following reasons: Dr. Cooper, of Ga., had incorporated these statistics in a report which he prepared for the State Medical Society of Georgia, and being, in some way satisfied of the falsity of those statistics, Dr. Cooper had requested permission to withdraw those statements, and the society had accorded to his wishes, thereby, apparently, endorsing Dr. Cooper's reformed views. The first intimation that Dr. Ramsey received of the conduct of the Georgia Medical Society was from Dr. Robertson's letter of exculpation, sent to Dr. De Saussure, and by him forwarded to Dr. Ramsey. This letter was written two months after the meeting of the American Medical Association, and, we repeat, gave Dr. Ramsey the first intimation that he had been accused, tried, condemned and punished by the Georgia Medical Society. And this singular conduct on the part of a State Medical Society was unquestionably the main element for the punishment of Dr. Ramsey before the American Medical Society. We can easily understand Dr. Storer's readiness to erase Dr Ramsey's statistics from the report, when he was told that the State Medical Society of Georgia, had rejected them as false.

In addition to this erroneous issue, other positions were taken. Dr. Robertson condemns Dr. Ramsey on various issues, which we shall briefly detail:

1st. Dr. Robertson charges that Dr. Ramsey reported 673 cases of midwifery, which according to Dr. Robertson yields an average of 67 cases per annum. Now, Dr. Ramsey's report claims no such numbers. *His* statistics claimed 47 and a fraction over per annum. This is a very material difference, which was scarcely justified by Dr. Ramsey's loose guess that he had probably attended 600 or more cases in all.

2d. One of the proofs of Dr. Ramsey's falsity was found in the statement, that Dr. R. had been a practitioner only about ten years, and not continuously in one place. But these are not facts: Dr. Ramsey had been in practice at least twelve years when his paper was published, and had been continuous in one locality during the time embraced in his report.

3d. It was alleged against Dr. Ramsey, that his "portion of country was not densely populated, and in which there were the usual number of competitors for public patronage." But Dr. Ramsey fully establishes the fact, that his neighborhood is "thickly settled," and notwithstanding

the competition, Dr. Ramsey had a heavy obstetrical practice, and his "competitors" say, that he had no competition in this branch of professional business.

Dr. Ramsey very triumphantly sustains his professional and moral character, by the testimony of *his medical brethren in his immediate vicinity*. They rely on his statistics, and their confidence, they say, is based on personal knowledge.

We shall not enter upon any examination of the personalities between Drs. Robertson and Ramsey, but we felt that justice required of us the statement we have given of Dr. Ramsey's case. He has been seriously injured before the profession of the United States. He was condemned before the American Medical Association, by a species of "snap judgment," as our confrères of the Medical Examiner express it, and the medical journals spread before their readers the proceedings of the American Medical Association; and for this reason, we think that Dr. Ramsey's defence should go before the same readers.

We hope that Dr. Ramsey will bear with us in our condemnation of the coarse language he employs too frequently. His provocation was great, the treatment he received was well calculated to rouse his ire, but even that should not have made him forget, that a physician is bound to be a gentleman in all circumstances. When a physician descends to the language of billingsgate and St. Giles, he injures himself more than any one else. Dr. Ramsey's remarks about the "sable heart," "pigs and puppies," and "the Georgia Medical Society," do him more harm than those against whom they are directed. We earnestly wish he had permitted some cool friend to revise his manuscript, and erase and correct freely. But despite all his sins of language, we congratulate him on his triumphant defence. B.

DR. FENNER'S SOUTHERN REPORTS.

We regret that a notice of this valuable work has been crowded out of this number of the Journal. Dr. Fenner deserves great praise and encouragement for the contributions he is making to medical science, by the publication of his valuable annual. He should receive the aid of all who feel any desire to sustain and cherish valuable medical enterprises. Dr. Fenner's work is published at two dollars and fifty cents, and it is richly worth its cost to any one who feels interested in the advancement of the medical profession.

In a future number, we shall endeavor to make our readers better acquainted with the character of Dr. Fenner's Southern Medical Reports.

B.

CONVENTION OF MEDICAL DELEGATES.

We are pleased to learn that the indications of a large attendance of delegates to the proposed convention for constituting a State Medical Society, in Kentucky, are in the highest degree propitious to the success of the enterprize. It is singular that a State which has made so many contributions to the progress of medical science, as Kentucky has, which, for a long period of time, had the principal medical school of the west and south in it, should have been so long without a State Medical Society. But the profession is awaking to the importance of having such a society, and we earnestly hope that Kentucky will soon possess one, fixed upon a proper basis for usefulness, devoted to no clique or party, but to the advancement and elevation of the whole profession, and each worthy member of it. It is within the capacity of the physicians of Kentucky, to found a medical society that may vie with any in the Union in all the elements of usefulness and permanent prosperity, and sincerely do we trust that such will be the result of the labors of the convention.

B.

PROFESSOR SILLIMAN.

The numerous friends and admirers of Professor Silliman, in the west and south will be pleased to learn of his return to the United States, from his European travels. He arrived in the Pacific, and will soon return to Louisville, preparatory to the opening of the session for lectures in the medical department of the University of Louisville. Prof. Silliman's means of chemical instruction were, it is known to those who have been in his classes, ample for a comprehensive course, but he has increased them during his recent visit to Europe.

B.

OBITUARY.

We regret to hear of the death of Dr. William W. Tyler, which took place on the 27th of August, near Columbia, Tenn., of typhoid fever. Dr. T. was a young physician of great worth and promise, and had just entered upon the practice of his profession with bright prospects of success and usefulness.

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